COFICAB

Powered by *Passion*

WIRES & CABLES

FOR TOMORROW'S TECHNOLOGIES

CABLES FOR CONNECTIVITY

COFICAB designs and manufactures high transmission rate cables for multmedia systems applications.

COF Data

WWW.COFICAB.COM

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ABOUT US

Since 1992

COFICAB is a member of ELLOUMI Group, founded in 1946 by Mr. Taoufik Elloumi in Tunisia. ELLOUMI Group is the biggest industrial and exporting group in this country, specializing in a wide variety of services, including automotive, power, and telecom cables, wire harnesses, agribusiness, real-estate, urban planning, retail, home appliances and consulting. ELLOUMI Group comprises 30 subsidiary companies worldwide and employs over 10 000 people.

COFICAB
is your leading global partner in the design, manufacturing, and sales of automotive cables and wires. COFICAB was founded in 1992 by Mr. Hichem Elloumi. Since then, it has experienced an incredible national and international expansion, and an unequaled speed of organic growth.

A very important part of COFICAB's mission, is not only to be at the forefront of technology, but also to be a leader in the field. For this reason, we position ourselves ahead of market trends and demands by offering a broad catalog of products that range from lighter and smaller automotive cables, such as COFskinny; automotive cables for connectivity applications, such as COFdata; cables for autonomous driving, such as COFsense, automotive cables for electric and hybrid cars, such as e-COF; tailor-made cables for and in collaboration with our customer, examples of which, you can see in our cable family, named TAILOR-MADE.

COFICAB develops automotive wires and cables for current applications, but also develops cables for applications that have not yet been required by the current market, which is possible thanks to the constant investment in human and material resources for Research and Development, with the objective to always be at the forefront of the market and the requests of our customers.

OUR SPIRIT OF QUALITY & EXCELLENCE

QUALITY
IATF 16949
ISO 9001

R&D LABORATORY
NP EN
ISO/IEC 17025

OEM accreditation by:
Daimler
FCA
FORD
GM
JLR
PSA
RSA
VW

ENVIRONMENT
HEALTH & SAFETY
ISO 14001
ISO 45001
EMAS

QUALITY

Undoubtedly, COFICAB is dedicated to quality values by continually providing innovative solutions to its partners in view of understanding their requirements and enhancing the productivity of their engineering and manufacturing applications.

Thanks to these values of knowledge and expertise, integrity, service and empowerment, COFICAB had succeeded to acquire ISO/TS 16949 version 2002 for all facilities in addition to the laboratory accreditation according to ISO 17025.

Our quality concern had driven us to implement up to date quality management systems and best practices that have allowed us to develop capable processes in order to prevent quality issues and, generally speaking, accomplish our corporate quality strategy.

ENVIRONMENT

The environment care and protection are an integral part of our health and safety corporate policies and are key elements in our progress.

We do certainly value the importance of an environment ecologically healthy and safe that's why we had combined all our efforts to reach this ultimate goal through the compliance to the ISO 14001 standards.

In this regard, COFICAB is fully complying with the European directives, IMDS system and is now completely engaged in the REACH program.

COF Data

AUTOMOTIVE

DATA CABLES

FOR CONNECTIVITY

COAXIAL CABLES

CAN CABLES

CAN-FD CABLES
TWISTED
JACKETED

FLEXRAY CABLES
TWISTED
JACKETED

ETHERNET CABLES
TWISTED
JACKETED UNSHIELDED
JACKETED SHIELDED

HSD CABLES

We can customize our cables on demand, e.g. we can produce all cross-sections and temperature classes upon request.

PRODUCTS OVERVIEW

COAXIAL CABLES

Cable type	Conductor type	Dielectric Insulation	Screening	Jacket Material	Temperature Range/3000h	Characteristic Impedance	Screening Attenuation	Capacitance	Page
COFDATA 50 031 105	Bare Copper 0,35mm²	PP foamed	AL/PET/AL foil + tinned copper braid	PVC	-40°C to 105°C	50 ± 3 Ω	>75dB	Max. 94 pF/m at 800Hz	09
COFDATA 50 031 105-1	Bare Copper 0,35mm²	PP foamed	Cu/PET foil + tinned copper braid	PVC	-40°C to 105°C	50 ± 3 Ω	>75dB	Max. 94 pF/m at 800Hz	10
COFDATA 50 174 105	Copper-Clad Steel 0,14mm²	PP	Tinned copper braid	PVC	-40°C to 105°C	50 ± 2 Ω	>45dB	≈ 100 pF/m at 1kHz	11
COFDATA 50 174 105-1	CuSn0,3 alloy 0,14mm²	PP	AL/PET/AL foil + tinned copper braid	PVC	-40°C to 105°C	50 ± 3 Ω	< 1GHz 75dB; 1 up to 3 GHz linear fall 75 up to 63dB; > 3 GHz 63dB	≈ 100 pF/m at 1kHz	12
COFDATA 50 174 105-2	Copper-Clad Steel 0,14mm²	PP	AL/PET/AL foil + tinned copper braid	PVC	-40°C to 105°C	50 ± 3 Ω	< 1GHz 75dB; 1 up to 3 GHz linear fall 75 up to 63dB; > 3 GHz 63dB	≈ 100 pF/m at 1kHz	13
COFDATA 50 174 125	Copper-Clad Steel 0,14mm²	PP	AL/PET/AL foil + tinned copper braid	TPE-U	-40°C to 125°C	50 ± 3 Ω	>75dB	≈ 100 pF/m at 1kHz	14
COFDATA 50 174 105L	Solid Bare Copper 0,16mm²	PP	AL/PET/AL foil + tinned copper braid	PVC	-40°C to 105°C	50 ± 2 Ω	>75dB	<105,6 pF/m at 1kHz	15
COFDATA 50 058 105L	Solid Bare Copper 0,80mm²	PP foamed	AL/PET/AL foil + tinned copper braid	PVC	-40°C to 105°C	50 ± 3 Ω	>75dB	≈ 82 pF/m at 1kHz	16
COFDATA 50 058 105L-1	Solid Bare Copper 0,80mm²	PP foamed	Cu/PET foil + bare copper braid	PVC	-40°C to 105°C	50 ± 3 Ω	>75dB	≈ 82 pF/m at 1kHz	17
COFDATA 50 1.5DS 105	Tinned Copper 0,22mm²	PP foamed	Cu/PET foil + tinned copper braid	PVC	-40°C to 105°C	50 ± 3 Ω	>45dB	≈ 83 pF/m at 1kHz	18
COFDATA 50 2DS 105	Tinned Copper 0,40mm²	PP foamed	Double tinned copper braid	PVC	-40°C to 105°C	50 ± 3 Ω	>60dB	≈ 83 pF/m at 1kHz	19
COFDATA 50 20G 105	Solid Bare Copper 0,50mm²	PP foamed	AL/PET/AL foil + tinned copper braid	PVC	-40°C to 105°C	50 ± 3 Ω	< 6 GHz 80dB; 6 up to 8 GHz 70dB; 8 up to 20 GHz 60dB	≈ 85 pF/m at 1kHz	20
COFDATA 50 20G 105-1	Solid Bare Copper 0,50mm²	PP foamed	Cu/PET foil + bare copper braid	PVC	-40°C to 105°C	50 ± 3 Ω	< 6 GHz 80dB; 6 up to 8 GHz 70dB; 8 up to 20 GHz 60dB	≈ 85 pF/m at 1kHz	21

CAN CABLES

Cable type	Conductor type	Insulation	Temperature Range/3000h	Characteristic Impedance	Capacitance	Page
FLCuSn03R9Y	CuSn0,3 alloy 2 x 0,13mm²	PP	-40°C to 110°C	120 Ω ± 10%	<50 pF/m at 1kHz	23

CAN-FD CABLES - Twisted

Cable type	Conductor type	Insulation	Temperature Range/3000h	Characteristic Impedance	Capacitance	Page
FLS9Y	Bare Copper 2 x 0,35mm²	PP	-40°C to 125°C	120 Ω +19,2 -9,6	<50 pF/m at 1kHz	25
FLCuSn03R9Y	CuSn0,3 alloy 2 x 0,13mm²	PP	-40°C to 125°C	120 Ω +14,4 -9,6	<50 pF/m at 1kHz	26
FLCuSn03R2X	CuSn0,3 alloy 2 x 0,13mm²	XPE	-40°C to 125°C	120 Ω +19,2 -9,6	<50 pF/m at 1kHz	27

CAN-FD CABLES - Jacketed

Cable type	Conductor type	Insulation	Jacket Material	Temperature Range/3000h	Characteristic Impedance	Capacitance	Page
FLCuSn03R9Y-Y	CuSn0,3 alloy 2 x 0,13mm²	PP	PVC	-40°C to 105°C	120 ± 5 Ω	<50 pF/m at 1kHz	29
FLCuSn03S2X-2X T3	CuSn0,3 alloy 2 x 0,13mm²	XPE	XPE	-40°C to 125°C	120 Ω ± 10 %	<50 pF/m at 1kHz	30
FLCuSn03S2X-2X T4	CuSn0,3 alloy 2 x 0,13mm²	XPE	XPE	-40°C to 150°C	120 Ω ± 10 %	<50 pF/m at 1kHz	31

FLEXRAY CABLES - Twisted

Cable type	Conductor type	Insulation	Temperature Range/3000h	Characteristic Impedance	Insertion Loss	Page
FLRY	Bare Copper 2 x 0,35mm² 2 x 0,50mm²	PVC	-40°C to 105°C	100 ± 10 Ω	<82dB/Km @ 5MHz <140dB/Km @ 10MHz <195dB/Km @ 15MHz <245dB/Km @ 20MHz <290dB/Km @ 25MHz <500dB/Km @ 50MHz	33
FLR9Y	Bare Copper 2 x 0,35mm² 2 x 0,50mm² 2 x 0,75mm²	PP	-40°C to 125°C	100 ± 10 Ω		34
FLR2X T3	Bare Copper 2 x 0,35mm² 2 x 0,50mm² 2 x 0,75mm²	XPE	-40°C to 125°C	100 ± 10 Ω		35
FLR2X T4	Bare Copper 2 x 0,35mm² 2 x 0,50mm² 2 x 0,75mm²	XPE	-40°C to 150°C	100 ± 10 Ω		36

FLEXRAY CABLES - Jacketed

Cable type	Conductor type	Insulation	Jacket Material	Temperature Range/3000h	Characteristic Impedance	Insertion Loss	Page
FLR09YS-YW	Tinned Copper 2 x 0,35 mm²	PP foamed	PVC	-40°C to 105°C	100 ± 7 Ω	<82dB/Km @ 5MHz <140dB/Km @ 10MHz <195dB/Km @ 15MHz <245dB/Km @ 20MHz <290dB/Km @ 25MHz <500dB/Km @ 50MHz	38
FL2X11Y	Bare Copper 2 x 0,35mm²	XPE	TPE-U	-40°C to 125°C	100 ± 10 Ω		39
FLS2X2X T4	Bare Copper 2 x 0,35mm²	XPE	XPE	-40°C to 150°C	100 ± 7 Ω		40

ETHERNET CABLES - Twisted

Cable type	Conductor type	Insulation	Lay length	Temperature Range/3000h	Characteristic Impedance	Insertion Loss	Data rate	Page
COFDATA 100 UUTP ETH 105 - 1	Bare Copper 2 x 0,35mm²	PP	13mm	-40°C to 105°C	100 ± 10 Ω	<0,06dB/m @ 1 MHz <0,16dB/m @ 10 MHz <0,31dB/m @ 33 MHz <0,45dB/m @ 66 MHz	100Mbps	42
COFDATA 100 UUTP ETH 105 - 2	Bare Copper 2 x 0,35mm²	PP	15mm	-40°C to 105°C	100 ± 10 Ω		100Mbps	43
COFDATA 100 UUTP ETH 125	Bare Copper 2 x 0,35mm²	PP	13mm	-40°C to 125°C	100 ± 10 Ω		100Mbps	44

ETHERNET CABLES - Jacketed Unshielded

Cable type	Conductor type	Insulation	Jacket Material	Temperature Range/3000h	Characteristic Impedance	Insertion Loss	Data rate	Page
COFDATA 100 JUTP ETH 105-1	CuMg0,2 2 x 0,13mm²	PP	PP	-40°C to 105°C	100 ± 10 Ω	<0,06dB/m @ 1 MHz <0,16dB/m @ 10 MHz <0,31dB/m @ 33 MHz <0,45dB/m @ 66 MHz	100Mbps	46
COFDATA 100 JUTP ETH 125	CuSn0,3 alloy 2 x 0,13mm²	PP	TPE-S	-40°C to 125°C	100 ± 10 Ω		100Mbps	47
COFDATA 100 JUTP ETH 125 - 4	Tinned Copper 2 x 0,35 mm²	PP	TPE-S	-40°C to 125°C	100 ± 10 Ω		100Mbps	48
COFDATA 100 JUTP ETH 125-7	CuSn0,3 alloy 2 x 0,13mm²	PP	TPE-S	-40°C to 125°C	100 ± 10 Ω		100Mbps	49

ETHERNET CABLES - Jacketed Shielded

Cable type	Conductor type	Insulation	Jacket Material	Temperature Range/3000h	Characteristic Impedance	Screening Attenuation	Insertion Loss	Data rate	Page
COFDATA 100 JSTP ETH 105	CuSn0,3 alloy 2 x 0,13mm²	PP	PP	-40°C to 105°C	100 ± 5 Ω	≥45dB	<0,037dB/m @ 1 MHz <0,106dB/m @ 10 MHz <0,344dB/m @ 100 MHz <0,896dB/m @ 600 MHz	1 Gbps	51
COFDATA 100 JSTP ETH 105-2	Tinned Copper 2 x 0,14mm²	PP foamed	PVC	-40°C to 105°C	100 ± 5 Ω	≥50dB	<1,273dB/m @ 1000 MHz <1,886dB/m @ 2000 MHz <2,396dB/m @ 3000 MHz <3,102dB/m @ 4600 MHz	Multi Gbps	52
COFDATA 100 JSTP ETH 105-3	Tinned Copper 2 x 0,14mm²	PP foamed	PVC	-40°C to 105°C	100 ± 5 Ω	≥35dB	<0,0397dB/m @ 1 MHz <0,115dB/m @ 10 MHz <0,370dB/m @ 100 MHz <0,958dB/m @ 600 MHz	1 Gbps	53
COFDATA 100 JSTP ETH CPP	Tinned Copper 2 x 0,35mm²	PP foamed	TPE-U	-40°C to 125°C	100 ± 10 Ω	≥55dB	<0,040dB/m @ 1 MHz <0,106dB/m @ 10 MHz <0,204dB/m @ 33 MHz <0,302dB/m @ 66 MHz	100Mbps	54

HSD CABLES

Cable type	Conductor type	Insulation	Jacket Material	Temperature Range/3000h	Characteristic Impedance	Screening Attenuation	Capacitance	Page
FL9YBC11Y	Tinned Copper 4 x 0,14mm²	PP	TPE-U	-40°C to 105°C	100 ± 6 Ω	≥40dB up to 3 GHz	≤55 pF/m at 1kHz	56

COAXIAL CABLES

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COFDATA 50 174 105-1	14
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COFDATA 50 058 105L	18
COFDATA 50 058 105L-1	19
COFDATA 50 1.5DS 105	20
COFDATA 50 2DS 105	21
COFDATA 50 20G 105	22
COFDATA 50 20G 105-1	23

COFDATA 50 031 105

-40°C ... 105°C

DESIGN

Conductor:	CU ETP1 EN 13602, bare
Dielectric:	CPP
Jacket material:	Polyvinyl chloride

TECHNICAL DATA

Temperature range:	-40°C ... 105°C
Characteristic impedance:	50 ± 3 Ω
Capacitance (at 800 Hz):	Max. 94 pF/m
Velocity of propagation:	≈ 78%
Screening attenuation:	> 75dB
Min. bending radius:	5xD (static)

CONSTRUCTION

Bare copper conductor, CPP dielectric, AL/PET/AL foil, tinned copper braiding and Polyvinyl Chloride jacket.

APPLICATION

Antenna cable.

ACCORDING TO THE STANDARD

VW N 909 934
PSA ST 00893_17_02660
Renault 36 - 05 - 045 / - - A
Daimler: J20
BMW: 6 923 610.9
GMW 18556
Ford - FMC 07142022

Type	Conductor				Core		Screen		Cable	
	Geometry			Resistance (20°C)	Geometry				Geometry	
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness nom.	Diameter	Construction	Coverage nom.	Wall thickness min.	Diameter
	[mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	N x N x Ømax.	[%]	[mm]	[mm]
COFDATA 50 031 105	0,35	7 x 0,26	0,81	52	-	2,1 -0,1	16 x 7 x 0,11	90	0,16	3,3 ± 0,1

COFDATA 50 031 105	
Frequency (GHz)	Attenuation (dB/100m) max.
0,05	12,9
0,1	17
0,4	35
0,8	50
0,9	53
1	56
1,5	69
2	80
2,1	84
2,4	91
2,5	93
3	104
5,6	152
6	159

Cable type			
Type	Cross-section	Color of sheath	Weight approx.
	[mm²]		[g/m]
COFDATA 50 031 105	0,35	BK	20

COFDATA 50 031 105-1

-40°C ... 105°C

DESIGN

Conductor:	CU ETP1 EN 13602, bare
Insulation material:	CPP
Jacket Material:	Polyvinyl Chloride

TECHNICAL DATA

Temperature range:	-40°C ... 105°C
Characteristic Impedance:	50 ± 3 Ω
Capacitance (at 800 Hz):	Max. 94 pF/m
Velocity of propagation:	≈ 78%
Screening Attenuation:	> 75dB

CONSTRUCTION

Bare copper conductor, CPP insulation, Cu-PET foil, tinned copper braiding and PVC jacket.

APPLICATION

Antenna cable.

Type	Conductor				Core		Screen		Cable	
	Geometry			Resistance (20°C)	Geometry				Geometry	
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness nom.	Diameter	Construction	Coverage nom.	Wall thickness min.	Diameter
	[mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	N x N x Ømax.	[%]	[mm]	[mm]
COFDATA 50 031 105-1	0,35	7 x 0,26	0,81	52	-	2,1 -0,1	16 x 7 x 0,11	90	0,16	3,3 ± 0,1

Type	Attenuation (dB/100m) máx.						
	Frequency (GHz)						
	0,1	0,4	1	2	2,5	5,6	6,0
COFDATA 50 031 105-1	21	36	58	85	98	154	161

Cable type			
Type	Cross-section [mm²]	Color of sheath	Weight approx. [g/m]
COFDATA 50 031 105-1	0,35	BK	20

COFDATA 50 031 105-2

-40°C … 105°C

DESIGN

Conductor:	CU ETP1 EN 13602, bare
Dielectric:	Polypropylene foamed
Jacket material:	Polyvinyl chloride

TECHNICAL DATA

Temperature range:	-40°C … 105°C
Characteristic impedance:	50 ± 3 Ω
Capacitance (at 1 kHz):	84 ± 6 pF/m
Velocity of propagation:	≥ 75%
Screening attenuation:	≥ 75dB

CONSTRUCTION

Bare copper conductor, polypropylene foamed dielectric, AL/PET/AL foil, tinned CCA braiding and Polyvinyl Chloride jacket.

APPLICATION

Antenna cable.

ACCORDING TO THE STANDARD

According client´s specifications

Type	Conductor				Core		Screen		Cable	
	Geometry			Resistance (20°C)	Geometry				Geometry	
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness nom.	Diameter	Construction	Coverage min.	Wall thickness min.	Diameter
	[mm²]	N x Ø$_{max.}$[mm]	[mm]	[mΩ/m]	[mm]	[mm]	N x N x Ø$_{nom.}$[mm]	[%]	[mm]	[mm]
COFDATA 50 031 105-2	0,35	7 x 0,26	0,81	52	0,6	2,1 -0,1	16 x 5 x 0,13	90	0,16	3,3 – 3,5

COFDATA 50 031 105-2	
Frequency (GHz)	Attenuation (dB/100m) max.
0,05	12,9
0,1	17,9
0,2	24
0,4	35
1	56
1,5	69
1,8	76
2	80
3	103
4	122
5	140
6	159

Cable type			
Type	Cross-section	Color of sheath	Weight Approx.
	[mm²]		[g/m]
COFDATA 50 031 105-2	0,35	BK	14

COFDATA 50 031 105-9

-40°C ... 105°C

DESIGN

Conductor: CU ETP1 EN 13602, bare
Dielectric: Polypropylene foamed
Jacket material: Polyvinyl chloride

TECHNICAL DATA

Temperature range: -40°C ... 105°C
Characteristic impedance: 50 ± 3 Ω
Capacitance (at 800 Hz): Max. 94 pF/m
Velocity of propagation: ≈ 78%
Screening attenuation: > 75dB
Min. bending radius: 5xD (static)

CONSTRUCTION

Bare copper conductor, polypropylene foamed dielectric, AL/PET/AL foil, TCCA braiding and Polyvinyl Chloride jacket.

APPLICATION

Antenna cable.

ACCORDING TO THE STANDARD

VW 75206-1
VW N 913 225

Type	Conductor				Core		Screen		Cable	
	Geometry			Resistance (20°C)	Geometry				Geometry	
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness nom.	Diameter	Construction	Coverage nom.	Wall thickness min.	Diameter
	[mm²]	N x Ømax.[mm]	[mm]	[mΩ/m]	[mm]	[mm]	N x N x Ømax.[mm]	[%]	[mm]	[mm]
COFDATA 50 031 105-9	0,35	7 x 0,26	0,81	52	-	2,1 -0,1	16 x 7 x 0,11	90	0,16	3,3 ± 0,1

COFDATA 50 031 105-9	
Frequency (GHz)	Attenuation (dB/100m) max.
0,05	12,9
0,1	17
0,4	35
0,8	50
0,9	53
1	56
1,5	69
2	80
2,1	84
2,4	91
2,5	93
3	104
5,6	152
6	159

Cable type			
Type	Cross-section	Color of sheath	Weight Approx.
	[mm²]		[g/m]
COFDATA 50 031 105-9	0,35	BK	14

COFDATA 50 174 105

-40°C to 105°C

DESIGN

Conductor:	CCS according to ASTM-B452
Insulation material:	Polypropylene
Jacket Material:	Polyvinyl Chloride

TECHNICAL DATA

Temperature range:	-40°C to 105°C
Characteristic Impedance:	50 ± 2 Ω
Capacitance (at 1kHz):	≈ 100 pF/m
Velocity of propagation:	≈ 66%
Screening Attenuation:	> 45 dB

CONSTRUCTION

RG cable, CCS conductor, Polypropylene insulation, tinned copper braiding and Polyvinyl Chloride jacket.

APPLICATION

Antenna cable.

ACCORDING TO THE STANDARD

VW N 105 784
PSA ST 00893_17_02660
Renault 36 - 05 - 045 / - - A
Daimler J14
BMW 6 946 303 (part no. 6 930 519.9)

Type	Conductor				Core		Screen		Cable	
	Geometry			Resistance (20°C)	Geometry				Geometry	
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness nom.	Diameter	Construction	Coverage min.	Wall thickness nom.	Diameter
	[mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	N x N x Ømax	[%]	[mm]	[mm]
COFDATA 50 174 105	0,14	7 x 0,16	0,5	317	0,42	1,5 ± 0,05	16 x 4 x 0,11	86	0,45	2,80 ± 0,1

Type	Attenuation (dB/100m) máx.			
	Frequency (GHz)			
	0,1	0,4	1	2
COFDATA 50 174 105	29	57	91,9	135,5

Cable type				
Type	Stripping Force shield Vs sheath	Cross-section	Color of sheath	Weight approx.
	[N]	[mm²]		[g/m]
COFDATA 50 174 105	5 - 30	0,14 (CCS)	BK	12

COFDATA 50 174 105-1

-40°C to 105°C

DESIGN

Conductor: CuSn0,3 alloy
Insulation material: Polypropylene
Jacket Material: Polyvinyl Chloride

TECHNICAL DATA

Temperature range: -40°C to 105°C / 3000h
to 130°C / 240h
Characteristic Impedance: 50 ± 3 Ω
Capacitance (at 1kHz): ≈ 100 pF/m
Velocity of propagation: > 63%
Screening Attenuation: < 1 GHz 75dB;
≥ 1 up to 3 GHz falling linearly from 75 to min. 63 dB;
≥ 3 GHz 63dB
Min. bending radius: 3xD (static)
10xD (dynamic)

CONSTRUCTION

Coaxial cable, CuSn0,3 alloy conductor, Polypropylene insulation, AL/PET/AL foil, tinned copper braiding and Polyvinyl Chloride jacket.

APPLICATION

Antenna cable.

ACCORDING TO THE STANDARD

VW N 109 019

Type	Conductor				Core		Screen		Cable	
	Geometry			Resistance (20°C)	Geometry				Geometry	
	Cross-section	Construction	Diameter nom.	Bare max.	Wall thickness nom.	Diameter	Construction	Coverage nom.	Wall thickness nom.	Diameter
	[mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	N x N x Ømax.	[%]	[mm]	[mm]
COFDATA 50 174 105-1	0,14	7 x 0,16	0,5	170	0,42	1,52 ± 0,05	16 x 4 x 0,11	85	0,32	2,8 ± 0,1

COFDATA 50 174 105-1	
Frequency (GHz)	Attenuation (dB/m) max.
0,05	23
0,1	29,5
0,4	55,4
0,625	74,6
0,75	79
0,8	80,4
0,9	85,6
1	90,7
1,5	114
1,9	129
2	133
2,1	137
2,25	145,4
2,4	148
2,5	151
3	168
3,75	189
4,5	211,1
5,6	242
6	249,9

Cable type				
Type	Stripping Force shield Vs sheath	Cross-section	Color of sheath	Weight approx.
	[N]	[mm²]		[g/m]
COFDATA 50 174 105-1	15 – 30	0,14 (CuSn)	BK	12

COFDATA 50 174 105-2

-40°C ... 105°C

DESIGN

Conductor:	CCS
Insulation material:	Polypropylene
Jacket Material:	Polyvinyl Chloride

TECHNICAL DATA

Temperature range:	-40°C ... 105°C
Characteristic Impedance:	50 ± 3 Ω
Capacitance (at 1kHz):	≈ 100 pF/m
Velocity of propagation:	≈ 66%
Screening Attenuation:	< 1GHz 75dB; 1 up to 3 GHz linear fall 75 up to 63dB; > 3 GHz 63Db
Min. bending radius:	3xD (static) 10xD (dynamic)

CONSTRUCTION

RG cable, CCS conductor, Polypropylene insulation, AL/PET/AL foil, tinned copper braiding and Polyvinyl Chloride jacket.

APPLICATION

Antenna cable.

ACCORDING TO THE STANDARD

VW N 109 014

Type	Conductor				Core		Screen		Cable	
	Geometry			Resistance (20°C)	Geometry				Geometry	
	Cross-section	Construction	Diameter nom.	Bare max.	Wall thickness nom.	Diameter	Construction	Coverage nom.	Wall thickness nom.	Diameter
	[mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	N x N x Ømax.	[%]	[mm]	[mm]
COFDATA 50 174 105-2	0,14	7 x 0,16	0,5	317	0,42	1,52 ± 0,05	16 x 4 x 0,11	85	0,45	2,80 ± 0,1

COFDATA 50 174 105-2	
Frequency (GHz)	**Attenuation (dB/100m) max.**
0,05	20,9
0,1	26,9
0,4	55,4
0,625	74,6
0,75	79
0,8	80,4
0,9	85,6
1	90,7
1,5	114
1,9	129
2	133
2,1	137
2,25	145
2,4	148
2,5	151
3	168
3,75	189,8
4,5	211,1
5,6	242
6	249,9

Cable type				
Type	Stripping Force shield Vs sheath	Cross-section	Color of sheath	Weight approx.
	[N]	[mm²]		[g/m]
COFDATA 50 174 105-2	5 - 30	0,14 (CCS)	BK	12

COFDATA 50 174 125

-40°C to 125°C

DESIGN

Conductor:	Copper-clad steel
Dielectric:	Polypropylene
Jacket material:	Thermoplastic polyurethane TPU

TECHNICAL DATA

Temperature range:	-40°C to 125°C
Characteristic impedance (at 20°C):	50 ± 3 Ω
Capacitance (at 1kHz):	≈ 100 pF/m
Velocity of propagation:	≈ 66%
Screening attenuation:	> 75dB

CONSTRUCTION

Coaxial cable, copper-clad steel conductor, polypropylene insulation, AL/PET/AL foil, tinned copper braiding and thermoplastic polyurethane jacket.

APPLICATION

Antenna cable.

Type	Conductor				Core		Screen		Cable	
	Geometry			Resistance (20°C)	Geometry				Geometry	
	Cross-section	Construction	Diameter nom.	Bare max.	Wall thickness nom.	Diameter	Construction	Coverage nom.	Wall thickness nom.	Diameter
	[mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	N x N x Ømax. [mm]	[%]	[mm]	[mm]
COFDATA 50 174 125	0,14	7 x 0,16	0,5	317	0,49	1,47 - 1,57	16 x 4 x 0,11	80	0,32	2,70 – 2,90

Type	Attenuation (dB/100m) Frequency (GHz)											
	0,1	0,2	0,5	0,75	0,8	1	1,2	1,5	1,8	2	2,2	2,25
COFDATA 50 174 125	27,6	38,6	60,5	76,5	78,6	88	97,3	109,5	121	128,6	136,8	138,5
	2,5	2,8	3	3,5	3,75	4	4,5	5	5,5	6	-	-
COFDATA 50 174 125	147,4	156,7	161,7	175	181	187	201	213	226	238	-	-

Cable type			
Type	Cross-section	Color of sheath	Weight approx.
	[mm²]		[g/m]
COFDATA 50 174 125	0,14	BK	12

COFDATA 50 174 105L

-40°C ... 105°C

DESIGN

Conductor:	CU ETP1 according to EN 13602
Dielectric:	Polypropylene solid
Jacket material:	Polyvinyl Chloride

TECHNICAL DATA

Temperature range:	-40°C ... 105°C
Characteristic Impedance:	50 ± 2 Ω
Capacitance (at 1kHz):	< 105,6 pF/m
Velocity of propagation:	> 66%
Screening Attenuation:	> 75dB

CONSTRUCTION

RG cable, bare solid copper conductor, Polypropylene dielectric, AL/PET/AL foil, tinned copper braiding and Polyvinyl Chloride jacket.

APPLICATION

Antenna cable.

Type	Conductor				Core		Screen		Cable	
	Geometry			Resistance (20°C)	Geometry				Geometry	
	Cross-section	Construction	Diameter nom.	Bare max.	Wall thickness nom.	Diameter	Construction	Coverage min.	Wall thickness nom.	Diameter
	[mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	N x N x Ømax	[%]	[mm]	[mm]
COFDATA 50 174 105L	0,16	1 x 0,448	0,448	114,8	-	1,58 ± 0,08	16 x 4 x 0,11	85	0,40	2,86 ± 0,13

Type	Attenuation (dB/100m)											
	Frequency (GHz)											
	0,001	0,01	0,05	0,1	0,2	0,4	0,7	0,9	1	1,1	1,2	1,3
COFDATA 50 174 105L	1,20	8,57	17,94	23,76	32,75	45,88	63,31	72,25	76,50	80,40	84,13	88,05
	1,4	1,5	1,6	2	2,3	2,4	-	-	-	-	-	-
COFDATA 50 174 105L	91,56	94,94	98,40	111,17	120,07	122,96	-	-	-	-	-	-

Nominal attenuation values to be confirmed

Cable type				
Type	Stripping Force shield Vs sheath [N]	Cross-section [mm²]	Color of sheath	Weight approx. [g/m]
COFDATA 50 174 105L	5 - 35	0,16	BK	14

COFDATA 50 058 105L

-40°C to 105°C

DESIGN

Conductor:	CU ETP1 acc. to EN13602, bare
Insulation material:	PP foamed
Jacket Material:	PVC

CONSTRUCTION

Bare solid copper conductor, PP foamed dielectric, AL/PET/AL foil, tinned copper braiding and PVC jacket.

TECHNICAL DATA

Temperature range:	-40°C to 105°C
Characteristic Impedance:	50 ± 3 Ω
Capacitance (at 1kHz):	≈ 82 pF/m
Screening Attenuation:	> 75dB

APPLICATION

Antenna cable.

Type	Conductor				Core		Screen		Cable	
	Geometry			Resistance (20°C)	Geometry				Geometry	
	Cross-section	Construction	Diameter nom.	Bare (20°C) max.	Wall thickness nom.	Diameter	Construction	Coverage nom.	Wall thickness nom.	Diameter
	[mm²]	N x Ønom. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	N x N x Ønom	[%]	[mm]	[mm]
COFDATA 50 058 105L	0,80	1 x 1,04	1,04	21,3	-	2,8 – 3,0	16 x 5 x 0,13	80	0,70	4,80 – 5,00

Type Typ	Attenuation (dB/100m) max.											
	Frequency (GHz)											
	0,03	0,05	0,1	0,2	0,5	0,7	0,9	1	1,5	1,8	2	2,5
COFDATA 50 058 105L	6,9	8,5	11,5	15,9	25,0	29,8	34,1	36,0	45,0	49,8	52,9	60,1
	3	3,5	4	4,5	5	5,5	6	-	-	-	-	-
COFDATA 50 058 105L	66,8	73,2	79,3	85,1	90,8	96,3	101,6	-	-	-	-	-

Cable type				
Type	Stripping Force shield Vs sheath [N]	Cross-section [mm²]	Color of sheath	Weight approx. [g/m]
COFDATA 50 058 105L	20 – 50	0,80	BK	36

COFDATA 50 058 105L-1

-40°C to 105°C

DESIGN

Conductor:	CU ETP1 acc. to EN13602, bare
Insulation material:	PP foamed
Jacket Material:	PVC

TECHNICAL DATA

Temperature range:	-40°C to 105°C
Characteristic Impedance:	50 ± 3 Ω
Capacitance (at 1kHz):	≈ 82 pF/m
Screening Attenuation:	> 75dB

CONSTRUCTION

Bare solid copper conductor, PP foamed dielectric, Cu-PET foil, bare copper braiding and PVC jacket.

APPLICATION

Antenna cable.

ACCORDING TO THE STANDARD

Ford FSB479-18812-AA

Type	Conductor				Core		Screen		Cable	
	Geometry			Resistance (20°C)	Geometry				Geometry	
	Cross-section	Construction	Diameter nom.	Bare (20°C) max.	Wall thickness nom.	Diameter	Construction	Coverage nom.	Wall thickness nom.	Diameter
	[mm²]	N x Ønom. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	N x N x Ønom.	[%]	[mm]	[mm]
COFDATA 50 058 105L-1	0,80	1 x 1,04	1,04	21,3	-	2,8 – 3,0	16 x 5 x 0,13	80	0,70	4,83 – 5,08

Type	Attenuation (dB/100m) max.												
	Frequency (GHz)												
	0,05	0,1	0,2	0,5	1	1,5	2	2,3	2,5	3	4	5	6
COFDATA 50 058 105L-1	9,8	13,1	17,4	27,8	40,9	50,8	59,3	63,9	67,8	74,0	90,7	101,5	115,6

Cable type				
Type	Stripping Force shield Vs sheath	Cross-section	Color of sheath	Weight approx.
	[N]	[mm²]		[g/m]
COFDATA 50 058 105L-1	20 – 50	0,80	BK	37

COFDATA 50 1.5DS 105

-40°C ... 105°C

DESIGN

Conductor:	CU ETP1 acc. to EN13602, tinned
Insulation material:	PP foamed
Jacket Material:	PVC

TECHNICAL DATA

Temperature range:	-40°C ... 105°C
Characteristic Impedance:	50 ± 3 Ω
Capacitance (at 1kHz):	≈ 83 pF/m
Screening Attenuation:	> 45dB

CONSTRUCTION

Coaxial cable, tinned copper conductor, PP foamed dielectric, CU/PET foil, tinned copper braiding and PVC jacket.

APPLICATION

Antenna cable.

Type	Conductor					Core		Screen / Schirm		Cable	
	Geometry				Resistance (20°C)	Geometry				Geometry	
	Cross-section		Construction	Diameter	Tinned max.	Wall thickness	Diameter	Construction	Coverage nom.	Wall thickness nom.	Diameter
	[mm²]	AWG	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	N x N x Ømax. [mm]	[%]	[mm]	[mm]
COFDATA 50 1.5DS 105	0,22	24	7 x 0,22	0,6 ± 0,03	89,4	-	1,6 ± 0,1	16 x 5 x 0,11	92	0,31	3,0 ± 0,2

Type	Attenuation (dB/100m)											
	Frequency (GHz)											
	0,03	0,05	0,1	0,5	1,0	1,4	1,5	2,5	3,0	4,0	5,0	6,0
COFDATA 50 1.5DS 105	14	17	24	53	76	91	95	126	139	164	186	207

Cable type				
Type	Cross-section		Color of sheath	Weight approx.
	[mm²]	AWG		[g/m]
COFDATA 50 1.5DS 105	0,22	24	BK	16

COFDATA 50 2DS 105

-40°C to 105°C

DESIGN

Conductor:	CU ETP1 EN13602, tinned
Dielectric:	PP foamed
Jacket material:	Polyvinyl chloride

TECHNICAL DATA

Temperature range:	-40°C to 105°C
Characteristic impedance (at 20°C):	50 ± 3 Ω
Capacitance (at 1kHz):	≈ 83 pF/m
Screening attenuation:	> 60dB

CONSTRUCTION

Coaxial cable, tinned copper conductor, PP foamed dielectric, double tinned copper braids and polyvinyl chloride jacket.

APPLICATION

Antenna cable.

Type	Conductor				Core	Screen		Cable	
	Geometry			Resistance (20°C)	Geometry			Geometry	
	Cross-section	Construction	Diameter	Tinned max.	Diameter	Construction	Coverage min.	Wall thickness min.	Diameter
	[mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	N x N x Ømax. [mm]	[%]	[mm]	[mm]
COFDATA 50 2DS 105	0,40	7 x 0,28	0,78 – 0,84	48,6	2,0 – 2,2	1st: 16 x 5 x 0,16 2nd: 16 x 5 x 0,16	95 90	0,28	4,0 – 4,4

Type	Attenuation (dB/100m)												
	Frequency (GHz)												
	0,01	0,05	0,1	0,2	0,4	0,5	0,9	1	1,4	1,5	1,6	2,5	3
COFDATA 50 2DS 105	1,7	3,8	5,3	7,7	11,2	12,6	17,6	18,8	22,7	23,7	24,7	32,3	36,5

Cable type			
Type	Cross-section	Color of sheath	Weight approx.
	[mm²]		[g/m]
COFDATA 50 2DS 105	0,40	BK	41

COFDATA 50 20G 105

-40°C to 105°C

DESIGN

Conductor:	CU ETP1 EN13602, bare
Dielectric:	PP foamed
Jacket material:	Polyvinyl chloride

TECHNICAL DATA

Temperature range:	-40°C to 105°C
Characteristic impedance (at 20°C):	50 ± 3 Ω
Test voltage:	2 kVeff/3s
Capacitance (at 1kHz):	≈ 85 pF/m
Screening attenuation:	< 6 GHz 80dB; 6 up to 8 GHz 70dB; 8 up to 20 GHz 60dB

CONSTRUCTION

Solid bare copper conductor, dielectric PP foamed, AL/PET/AL foil, tinned copper braiding and polyvinyl chloride jacket.

APPLICATION

Data transmission up to 20 GHz.

Type	Conductor				Core	Screen		Cable	
	Geometry			Resistance (20°C)	Geometry			Geometry	
	Cross-section	Construction	Diameter max.	Bare max.	Diameter	Construction	Coverage nom.	Wall thickness min.	Diameter
	[mm²]	N x Ønom. [mm]	[mm]	[mΩ/m]	[mm]	N x N x Ømax[mm]	[%]	[mm]	[mm]
COFDATA 50 20G 105	0,50	1 x 0,84	0,85	33,9	2,35 – 2,45	16 x 7 x 0,11	94	0,16	3,4 – 3,5

Type	Attenuation (dB/100m) max.											
	Frequency (GHz)											
	0,1	0,2	0,5	1,0	1,5	2,0	2,5	3,0	4,0	5,0	6,0	10,0
COFDATA 50 20G 105	17,3	22,8	34,1	47,4	56,8	65,7	74,2	82,3	98,1	113,3	128,2	185,0
	15	18	20	-	-	-	-	-	-	-	-	-
COFDATA 50 20G 105	252,9	292,7	318,9	-	-	-	-	-	-	-	-	-

Cable type			
Type	Cross-section	Color of sheath	Weight approx.
	[mm²]		[g/m]
COFDATA 50 20G 105	0,50	BK	22

COFDATA 50 20G 105-1

-40°C to 105°C

DESIGN

Conductor:	CU ETP1 EN13602, bare
Dielectric:	PP foamed
Jacket material:	Polyvinyl chloride

TECHNICAL DATA

Temperature range:	-40°C to 105°C
Characteristic impedance (at 20°C):	50 ± 3 Ω
Test voltage:	2 kVeff/3s
Capacitance (at 1kHz):	≈ 85 pF/m
Screening attenuation:	< 6 GHz 80dB; 6 up to 8 GHz 70dB; 8 up to 20 GHz 60dB

CONSTRUCTION

Solid bare copper conductor, dielectric PP foamed, Cu PET foil, bare copper braiding and polyvinyl chloride jacket.

APPLICATION

Data transmission up to 20 GHz.

Type	Conductor				Core	Screen		Cable	
	Geometry			Resistance (20°C)	Geometry			Geometry	
	Cross-section	Construction	Diameter max.	Bare max.	Diameter	Construction	Coverage min.	Wall thickness min.	Diameter
	[mm²]	N x Ønom. [mm]	[mm]	[mΩ/m]	[mm]	N x N x Ømax[mm]	[%]	[mm]	[mm]
COFDATA 50 20G 105-1	0,50	1 x 0,84	0,85	33,9	2,35 – 2,45	16 x 7 x 0,11	85	0,16	3,4 – 3,6

Type	Attenuation (dB/100m) max.											
	Frequency (GHz)											
	0,1	0,2	0,5	1,0	1,5	2,0	2,5	3,0	4,0	5,0	6,0	10,0
COFDATA 50 20G 105-1	17,3	22,8	34,1	47,4	56,8	65,7	74,2	82,3	98,1	113,3	128,2	185,0
	15	18	20	-	-	-	-	-	-	-	-	-
COFDATA 50 20G 105-1	252,9	292,7	318,9	-	-	-	-	-	-	-	-	-

Cable type			
Type	Cross-section	Color of sheath	Weight approx.
	[mm²]		[g/m]
COFDATA 50 20G 105-1	0,50	BK	23

CAN CABLES
TWISTED

FLCuSn03R9Y	23

FLCuSn03R9Y

-40°C to 110°C

DESIGN

Conductor:	Strands of copper alloy CuSn0,3 alloy; IACS 72% Sn content 0,3 ±0,05%
Insulation material:	Low loss and low permittivity insulation compound polypropylene
Covering:	Reduced wall thickness

TECHNICAL DATA

Voltage level:	60 V
Temperature range:	-40°C to 110°C / 3000h
Characteristic impedance (at 20°C):	120 ± 10 Ω
Capacitance (at 1kHz):	< 50 pF/m

CONSTRUCTION

Twisted polypropylene single cores. Lay length according to the table.

APPLICATION

Automotive cables with excellent electrical properties for general use in CAN-Bus or sensor cables in engine compartment with very low capacitance, low line delay and low losses. Low change of electrical properties in the whole temperature range.

ACCORDING TO THE STANDARD

LV 112-4 and LV 122

Type	CAD Nr.	Conductor				Core		Cable	
		Geometry			Resistance (20°C)	Geometry		Geometry	
		Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Lay length	Diameter approx.
		[mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	[mm]
FLCuSn03R9Y	-	2 x 0,13	7 x 0,158	0,49	170	0,20	0,95 – 1,05	11 ±2	2,1
FLCuSn03R9Y	B48/5 B48/9	2 x 0,13	7 x 0,158	0,49	170	0,20	0,95 – 1,05	15 ±2	2,1

Cable type			
Type	Cross-section	Lay length	Weight approx.
	[mm²]		[g/m]
FLCuSn03R9Y	2 x 0,13	11 ±2	4,5
FLCuSn03R9Y	2 x 0,13	15 ±2	4,5

CAN-FD CABLES
TWISTED

FLS9Y	25
FLCuSn03R9Y	26
FLCuSn03R2X	27

FLS9Y

-40°C … 125°C

DESIGN

Conductor: CU ETP1 EN 13602, bare
Insulation material: PP insulation compound

TECHNICAL DATA for 2x0.35mm²

Voltage level: 60V
Temperature range: -40°C … 125°C/3000h
Capacitance (at 1kHz): < 50 pF/m
Characteristic Impedance: 120 + 19,2 Ω
- 9,6 Ω

TECHNICAL DATA for 2x0.50mm²

Voltage level: 60V
Temperature range: -40°C … 125°C/3000h
Capacitance (at 0,1MHz): 75 pF/m
Characteristic Impedance: 120 + 12 Ω
- 12 Ω

CONSTRUCTION

Twisted PP single cores.

APPLICATION

Automotive cables with excellent electrical properties for CAN FD also in engine compartment with very low capacitance, low line delay and low losses. Low change of electrical properties in the whole temperature range.

ACCORDING TO THE STANDARD

1. VW N 108 564
2. ISO 19642

Type	Conductor				Cable			
	Geometry			Resistance (20°C)	Geometry			According to the Standard
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Pitch	
	[mm²]	N x Ømax.[mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	
FLS9Y Twisted CAN-FD	2 x 0,35	7 x 0,26	0,8	53,4	0,24	1,55 -0,1	20 ±2	1
FLS9Y Twisted CAN-FD	2 x 0,50	19 x 0,19	1,0	38,5	0,43	2,05 -0,1	20 ±2	2

Cable type			
Type	Cross-section	Color	Weight approx.
	[mm²]		[g/m]
FLS9Y Twisted CAN-FD	2 x 0,35	Acc. to the order	10
FLS9Y Twisted CAN-FD	2 x 0,50	Acc. to the order	16

FLCuSn03R9Y

-40°C to 125°C

DESIGN

Conductor: Strands of copper alloy
CuSn0,3 alloy; IACS 72%
Sn content 0,3% ±0,05%

Insulation material: Polypropylene insulation compound

CONSTRUCTION

Twisted polypropylene single cores.

APPLICATION

Automotive cables with excellent electrical properties for CAN FD with very low capacitance, low line delay and low losses. Low change of electrical properties in the whole temperature range. Can be used in engine compartment also.

TECHNICAL DATA

Voltage level: 60V
Temperature range: -40°C to 125°C / 3000h
Capacitance (at 1kHz): < 50 pF/m
Characteristic impedance (at 20°C): 120 Ω + 14,4 Ω - 9,6 Ω

ACCORDING TO THE STANDARD

VW N 108 604

Type	Conductor				Cable		
	Geometry			Resistance (20°C)	Geometry		
	Cross-section	Construction	Diameter max.	Bare max.	Lay length	Wall thickness min.	Diameter
	[mm²]	N x Ømax.[mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]
FLCuSn03R9Y	2 x 0,13	7 x 0,154	0,49	175	15 ±5	0,2	0,95 – 1,05

Cable type		
Type	Cross-section	Weight approx.
	[mm²]	[g/m]
FLCuSn03R9Y	2 x 0,13	4,3

FLCuSn03R2X

-40°C to 125°C

DESIGN

Conductor:	Strands of copper alloy CuSn0,3 alloy; IACS 72% Sn content 0,3% ±0,05%
Insulation material:	Cross-linked polyethylene insulation compound

CONSTRUCTION

Twisted cross-linked polyethylene single cores.

APPLICATION

Automotive cables with excellent electrical properties for CAN FD with very low capacitance, low line delay and low losses. Low change of electrical properties in the whole temperature range. Can be used in engine compartment also.

TECHNICAL DATA

Voltage level:	60 V
Temperature range:	-40°C to 125°C / 3000h
Capacitance (at 1kHz):	< 50 pF/m
Characteristic impedance (at 20°C):	120 Ω + 19,2 Ω - 9,6 Ω

ACCORDING TO THE STANDARD

According client´s specifications

Type	Conductor				Cable		
	Geometry			Resistance (20°C)	Geometry		
	Cross-section	Construction	Diameter max.	Bare max.	Lay length	Wall thickness min.	Diameter
	[mm²]	N x Ømax.[mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]
FLCuSn03R2X	2 x 0,13	7 x 0,158	0,49	175	15 ±5	0,2	0,95 – 1,05

Cable type		
Type	Cross-section	Weight approx.
	[mm²]	[g/m]
FLCuSn03R2X	2 x 0,13	4,5

CAN-FD CABLES
JACKETED

FLCuSn03R9Y-Y	31
FLCuSn03S2X-2X T3	32
FLCuSn03S2X-2X T4	33
FLCuSn03R9Y-Y	34

FLCuSn03R9Y-Y

-40°C to 105°C

DESIGN

Conductor:	Strands of copper alloy CuSn0,3 alloy; IACS 72% Sn content 0,3 ±0,05%
Insulation material:	Low loss and low permittivity insulation compound polypropylene
Jacket Material:	Polyvinyl chloride plasticized

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 105°C / 3000h
Capacitance (at 1kHz):	< 50 pF/m
Characteristic Impedance (at 20°C):	120 ± 5 Ω

CONSTRUCTION

Polyvinyl jacketed cable with twisted polypropylene single cores and separating tape.

APPLICATION

Automotive cables with excellent electrical properties for general use in CAN-Bus or sensor cables in engine compartment with very low capacitance, low line delay and low losses. Low change of electrical properties in the whole temperature range.

ACCORDING TO THE STANDARD

Daimler H35/15

Type	Conductor				Core			Cable	
	Geometry			Resistance (20°C)	Geometry			Geometry	
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Lay length	Wall thickness nom.	Diameter
	[mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	[mm]	[mm]
FLCuSn03R9Y-Y	2 x 0,13	7 x 0,158	0,49	170	0,20	0,95 – 1,05	25 ±3	0,5	3,2 – 3,4

Cable type		
Type	Cross-section	Weight approx.
	[mm²]	[g/m]
FLCuSn03R9Y-Y	2 x 0,13	14,4

FLCuSn03R2X-2X T3

-40°C to 125°C

DESIGN

Conductor:	Strands of copper alloy CuSn0,3 alloy; IACS 72% Sn content 0,3 ±0,05%
Insulation material:	Low loss and low permittivity insulation compound XPE E-beam cross-linked
Jacket Material:	XPE E-beam cross-linked

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 125°C / 3000h
Capacitance (at 1kHz):	< 50 pF/m
Characteristic Impedance:	120 Ω + 16 % - 8%

CONSTRUCTION

XPE jacketed cable with twisted XPE single cores and separating tape.

APPLICATION

Automotive cables with excellent electrical properties for general use in CAN-Bus or Sensor cables in engine compartment with very low capacitance, low line delay and low losses. Low change of electrical properties in the whole temperature range.

ACCORDING TO THE STANDARD

Daimler H35/16

Type	Conductor				Core		Cable		
	Geometry			Resistance (20°C)	Geometry		Geometry		
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Lay length	Wall thickness min.	Diameter
	[mm²]	N x Ømax.[mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	[mm]	[mm]
FLCuSn03R2X-2X	2 x 0,13-A	7 x 0,158	0,49	170	0,20	1,0 – 1,2	25 ±3	0,32	3,2 – 3,4

Cable type			
Type	Cross-section	Color	Weight approx.
	[mm²]		[g/m]
FLCuSn03R2X-2X	2 x 0,13-A	Acc. to the order	14

FLCuSn03S2X-2X T4

-40°C to 150°C

DESIGN

Conductor:	Strands of copper alloy CuSn0,3 alloy; IACS 72% Sn content 0,3 ±0,05%
Insulation material:	Low loss and low permittivity insulation compound polyethylene cross-linked
Jacket material:	Polyethylene cross-linked

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 150°C / 3000h
Capacitance (at 1kHz):	< 50 pF/m
Characteristic impedance (at 20°C):	120 ± 10 Ω

CONSTRUCTION

Polyethylene cross-linked jacketed cable with twisted polyethylene cross-linked single cores and separating tape.

APPLICATION

Automotive cables with excellent electrical properties for general use in CAN-Bus or sensor cables in engine compartment with very low capacitance, low line delay and low losses. Low change of electrical properties in the whole temperature range.

ACCORDING TO THE STANDARD

According client´s specifications

Type	Conductor				Core		Cable		
	Geometry			Resistance (20°C)	Geometry		Geometry		
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Lay length	Wall thickness min.	Diameter
	[mm²]	N x Ømax.[mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	[mm]	[mm]
FLCuSn03S2X-2X T4	2 x 0,13	7 x 0,158	0,49	170	0,20	1,1 – 1,25	25 ±3	0,32	3,2 – 3,4

Cable type		
Type	Cross-section	Weight approx.
	[mm²]	[g/m]
FLCuSn03S2X-2X T4	2 x 0,13	15

FLCuSn03R9Y-Y

-40°C to 105°C

DESIGN

Conductor:	Strands of copper alloy CuSn0,3 alloy; IACS 72% Sn content 0,3 ±0,05%
Insulation material:	Low loss and low permittivity insulation compound polypropylene
Jacket Material:	Polyvinyl chloride plasticized

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 105°C / 3000h
Capacitance (at 1kHz):	< 50 pF/m
Characteristic Impedance (at 20°C):	120 ± 5 Ω

CONSTRUCTION

Polyvinyl jacketed cable with twisted polypropylene single cores and separating tape.

APPLICATION

Automotive cables with excellent electrical properties for general use in CAN-Bus or sensor cables in engine compartment with very low capacitance, low line delay and low losses. Low change of electrical properties in the whole temperature range.

ACCORDING TO THE STANDARD

Daimler H35/15

Type	Conductor				Core			Cable	
	Geometry			Resistance (20°C)	Geometry			Geometry	
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Lay length	Wall thickness nom.	Diameter
	[mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	[mm]	[mm]
FLCuSn03R9Y-Y	2 x 0,13	7 x 0,158	0,49	170	0,20	0,95 – 1,05	25 ±3	0,5	3,2 – 3,4

Cable type		
Type	Cross-section	Weight approx.
	[mm²]	[g/m]
FLCuSn03R9Y-Y	2 x 0,13	14,4

FLEXRAY CABLES
TWISTED

FLRY	33
FLR9Y	34
FLR2X T3	35
FLR2X T4	36

FLRY

-40°C to 105°C

DESIGN

Conductor:	CU ETP1 EN 13602, bare
Insulation material:	Plasticized polyvinyl chloride
Covering:	Reduced wall thickness

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 105°C / 3000h
Characteristic impedance (at 20°C):	100 ± 10 Ω
Insertion loss (at 20°C):	< 82 dB/km @ 5 MHz < 140 dB/km @ 10 MHz < 195 dB/km @ 15 MHz < 245 dB/km @ 20 MHz < 290 dB/km @ 25 MHz < 500 dB/km @ 50 MHz

CONSTRUCTION

Twisted single cores. Lay length according to the table.

APPLICATION

Twisted cable for general use in FlexRay applications.

ACCORDING TO THE STANDARD

STJLR.18.081

Type	Conductor				Core		Cable	
	Geometry			Resistance (20°C)	Geometry		Geometry	
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Lay length	Diameter approx.
	[mm²]	N x Ømax.[mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	[mm]
FLRY	2 x 0,35	7 x 0,26	0,8	54,4	0,20	1,2 – 1,4	20 ±2	2,8
FLRY	2 x 0,50	19 x 0,19	1,0	37,1	0,22	1,4 – 1,6	20 ±2	3,2

Cable type		
Type	Cross-section	Weight approx.
	[mm²]	[g/m]
FLRY	2 x 0,35	9
FLRY	2 x 0,50	12

FLR9Y

-40°C to 125°C

DESIGN

Conductor:	CU ETP1 EN 13602, bare
Insulation material:	Polypropylene
Covering:	Reduced wall thickness

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 125°C / 3000h
Characteristic impedance (at 20°C):	100 ± 10 Ω
Insertion loss (at 20°C):	< 82 dB/km @ 5 MHz
	< 140 dB/km @ 10 MHz
	< 195 dB/km @ 15 MHz
	< 245 dB/km @ 20 MHz
	< 290 dB/km @ 25 MHz
	< 500 dB/km @ 50 MHz

CONSTRUCTION

Twisted single cores. Lay length according to the table.

APPLICATION

Twisted cable with excellent electrical properties for general use in FlexRay or sensor cables in engine compartment with very low capacitance, low line delay and low losses. Low change of electrical properties in the whole temperature range.

ACCORDING TO THE STANDARD

1. VW N 107 668
2. STJLR.18.081

Type	Conductor				Core		Cable		
	Geometry			Resistance (20°C)	Geometry		Geometry		According to the Standard
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Lay length	Diameter approx.	
	[mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	[mm]	
FLR9Y	2 x 0,35	7 x 0,26	0,8	54,1	0,20	1,2 – 1,3	20 ±2	2,6	1, 2
FLR9Y	2 x 0,50	19 x 0,19	1,0	37,1	0,22	1,4 – 1,6	20 ±2	3,2	2
FLR9Y	2 x 0,75	19 x 0,23	1,2	24,7	0,24	1,7 – 1,9	20 ±2	3,8	2

Cable type			
Type	Cross-section	Lay length	Weight approx.
	[mm²]		[g/m]
FLR9Y	2 x 0,35	20 ±2	9
FLR9Y	2 x 0,50	20 ±2	12
FLR9Y	2 x 0,75	20 ±2	19

FLR2X T3

-40°C to 125°C

DESIGN

Conductor:	CU ETP1 EN 13602, bare
Insulation material:	Polyethylene E-beam cross-linked
Covering:	Reduced wall thickness

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 125°C / 3000h
Characteristic impedance (at 20°C):	100 ± 10 Ω
Insertion loss (at 20°C):	< 82 dB/km @ 5 MHz
	< 140 dB/km @ 10 MHz
	< 195 dB/km @ 15 MHz
	< 245 dB/km @ 20 MHz
	< 290 dB/km @ 25 MHz
	< 500 dB/km @ 50 MHz

CONSTRUCTION

Twisted single cores. Lay length according to the table.

APPLICATION

Twisted cable with excellent electrical properties for general use in FlexRay or sensor cables in engine compartment with very low capacitance, low line delay and low losses. Low change of electrical properties in the whole temperature range.

ACCORDING TO THE STANDARD

STJLR.18.081

Type	Conductor				Core		Cable	
	Geometry			Resistance (20°C)	Geometry		Geometry	
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Lay length	Diameter approx.
	[mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	[mm]
FLR2X T3	2 x 0,35	7 x 0,26	0,8	54,4	0,20	1,2 – 1,4	20 ±2	2,6
FLR2X T3	2 x 0,50	19 x 0,19	1,0	37,1	0,22	1,4 – 1,6	20 ±2	3,2
FLR2X T3	2 x 0,75	19 x 0,23	1,2	24,7	0,24	1,7 – 1,9	20 ±2	3,8

Cable type			
Type	Cross-section	Lay length	Weight approx.
	[mm²]		[g/m]
FLR2X T3	2 x 0,35	20 ±2	9
FLR2X T3	2 x 0,50	20 ±2	12
FLR2X T3	2 x 0,75	20 ±2	19

FLR2X T4

-40°C to 150°C

DESIGN

Conductor:	CU ETP1 EN 13602, bare
Insulation material:	XPE E-beam cross-linked, zero halogen, flame retardant
Covering:	reduced Wall thickness

CONSTRUCTION

Twisted single cores. Lay length according to the table.

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 150°C / 3000h
Characteristic impedance:	100 Ω ± 10
Insertion Loss:	
	< 82 dB/km @ 5 MHz
	< 140 dB/km @ 10 MHz
	< 195 dB/km @ 15 MHz
	< 245 dB/km @ 20 MHz
	< 290 dB/km @ 25 MHz
	< 500 dB/km @ 50 MHz

APPLICATION

Twisted cable with excellent electrical properties for general use in FlexRay or Sensor cables in engine compartment with very low capacitance, low line delay and low losses. Low change of electrical properties in the whole temperature range

ACCORDING TO THE STANDARD

STJLR.18.081

Type	Conductor				Core		Cable	
	Geometry			Resistance (20°C)	Geometry		Geometry	
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Lay length	Diameter approx.
	[mm²]	N x Ømax.[mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	[mm]
FLR2X T4	2 x 0,35-A	7 x 0,26	0,8	52,0	0,2	1,2 – 1,3	20 ±2	2,6
FLR2X T4	2 x 0,50-A	19 x 0,19	1,0	37,1	0,22	1,4 – 1,6	20 ±2	3,2
FLR2X T4	2 x 0,75-A	19 x 0,23	1,2	24,7	0,24	1,7 – 1,9	20 ±2	3,8

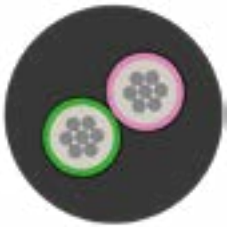
Cable type			
Type	Cross-section	Color	Weight approx.
	[mm²]		[g/m]
FLR2X T4	2 x 0,35-A	Acc. to the order	9
FLR2X T4	2 x 0,50-A	Acc. to the order	13
FLR2X T4	2 x 0,75-A	Acc. to the order	19

FLEXRAY CABLES
JACKETED

FLR09YS-YW	38
FL2X11Y	39
FLS2X2X T4	40

FLR09YS-YW

-40°C to 105°C



DESIGN

Conductor:	CU ETP1 EN 13602, tinned
Insulation material:	Polypropylene (foam-skin polypropylene)
Jacket material:	Polyvinyl chloride

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 105°C / 3000h
Attenuation (at 20°C):	60 dB/km max. (5MHz)
Attenuation (at -40 ... 105°C):	82 dB/km max. (5MHz)
Characteristic impedance (at 20°C):	100±7 Ω (10MHz)
Insertion loss (at 20°C):	< 82 dB/km @ 5 MHz < 140 dB/km @ 10 MHz < 195 dB/km @ 15 MHz < 245 dB/km @ 20 MHz < 290 dB/km @ 25 MHz < 500 dB/km @ 50 MHz

CONSTRUCTION

Jacketed cable with twisted polypropylene (foam-skin polypropylene) single cores. Polyvinyl chloride plasticized insulation for high flexibility and excellent mechanical properties.

APPLICATION

Unscreened cable for data transmission.

ACCORDING TO THE STANDARD

Daimler H35/1
VW N 911 629
BMW 6 946 298

Type	Conductor				Core		Cable		
	Geometry			Resistance (20°C)	Geometry		Geometry		
	Cross-section	Construction	Diameter max.	Tinned max.	Wall thickness min.	Diameter	Lay length	Wall thickness min.	Diameter
	[mm²]	N x Ømax [mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	[mm]	[mm]
FLR09YS-YW	2 x 0,35sn	7 x 0,26	0,8	55,5	0,15	1,25 – 1,35	30±5	0,5	3,85 – 4,15

Cable type		
Type	Cross-section	Weight approx.
	[mm²]	[g/m]
FLR09YS-YW	2 x 0,35sn	22

FL2X11Y

-40°C to 125°C

DESIGN

Conductor:	CU ETP1 according to EN 13602
Insulation material:	XPE E-beam cross-linked
Jacket Material:	Polyurethane (TPU)

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 125°C / 3000h
Characteristic impedance:	100 Ω ± 10
Insertion Loss:	< 82 dB/km @ 5 MHz < 140 dB/km @ 10 MHz < 195 dB/km @ 15 MHz < 245 dB/km @ 20 MHz < 290 dB/km @ 25 MHz < 500 dB/km @ 50 MHz

CONSTRUCTION

Polyurethane jacketed cable with twisted XPE E-beam cross-linked single cores.

APPLICATION

Cable for sensor applications and control cables.

ACCORDING TO THE STANDARD

Daimler drawing H35/6

Type	Conductor				Core		Cable		
	Geometry			Resistance (20°C)	Geometry		Geometry		
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Lay length nom.	Wall thickness min.	Diameter
	[mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	[mm]	[mm]
FL2X11Y	2 x 0,35	7 x 0,26	0,80	52,0	0,23	1,5 -0,1	30	0,42	4,2 -0,4

Cable type			
Type	Cross-section	Color	Weight approx.
	[mm²]		[g/m]
FL2X11Y	2 x 0,35	According to the order	20

FLS2X2X T4

-40°C to 150°C

DESIGN

Conductor: CU ETP1 EN 13602, bare
Insulation material: Polyethylene E-beam cross-linked
Covering: Special wall thickness
Jacket material: Polyethylene E-beam cross-linked

TECHNICAL DATA

Voltage level: 60V
Temperature range: -40°C to 150°C / 3000h
Characteristic impedance:
@ 20°C: 100 ± 7Ω @ 10MHz
@ (-40 to 150)°C: 100 +10Ω / -20Ω
@ (1 to 50)MHz
Insertion loss (at 20°C):
< 82 dB/km @ 5 MHz
< 140 dB/km @ 10 MHz
< 195 dB/km @ 15 MHz
< 245 dB/km @ 20 MHz
< 290 dB/km @ 25 MHz
< 500 dB/km @ 50 MHz

CONSTRUCTION

XPE jacketed cable with twisted single cores.

APPLICATION

FlexRay data cable.

ACCORDING TO THE STANDARD

VW N 912 398
Daimler H35/7

Type	Conductor				Core		Cable		
	Geometry			Resistance (20°C)	Geometry		Geometry		
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Lay length	Wall thickness min.	Diameter
	[mm²]	N x Ømax.[mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	[mm]	[mm]
FLS2X2X T4	2 x 0,35	7 x 0,26	0,8	55,5	0,2	1,65 – 1,75	30 ± 5	0,44	4,4 – 4,8

Cable type		
Type	Cross-section	Weight approx.
	[mm²]	[g/m]
FLS2X2X T4	2 x 0,35	26

ETHERNET CABLES
TWISTED

COFDATA 100 UUTP ETH 105-1 42
COFDATA 100 UUTP ETH 105-2 43
COFDATA 100 UUTP ETH 125 44

COFDATA 100 UUTP ETH 105 - 1

-40°C to 105°C

DESIGN

Conductor:	CU ETP1 EN 13602, bare
Insulation material:	Polypropylene low halogenated
Covering:	reduced wall thickness

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 105°C / 3000h
Characteristic impedance (at 20°C):	100 ± 10 Ω
Insertion loss (at 20°C):	< 0,06 dB/m @ 1 MHz < 0,16 dB/m @ 10 MHz < 0,22 dB/m @ 16 MHz < 0,31 dB/m @ 33 MHz < 0,45 dB/m @ 66 MHz

ACCORDING TO THE STANDARD

BMW 6 946 298 (9 362 623.9)

Type	Conductor				Cable		
	Geometry			Resistance (20°C)	Geometry		
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Lay length
	[mm²]	N x Ømax.[mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]
COFDATA 100 UUTP ETH 105 - 1	2 x 0,35	7 x 0,26	0,8	52	0,20	1,20 – 1,30	13 ± 2

Cable type		
Type	Cross-section	Weight approx.
	[mm²]	[g/m]
COFDATA 100 UUTP ETH 105 - 1	2 x 0,35	9,1

COFDATA 100 UUTP ETH 105 - 2

-40°C to 105°C

DESIGN

Conductor:	CU ETP1 EN 13602, bare
Insulation material:	Polypropylene low halogenated
Covering:	reduced wall thickness

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 105°C / 3000h
Characteristic impedance (at 20°C):	100 ± 10 Ω
Capacitance conductor/conductor at:	
	100 Hz @ 2 MHz < 50 Pf/m
Insertion loss (at 20°C):	< 0,06 dB/m @ 1 MHz
	< 0,16 dB/m @ 10 MHz
	< 0,31 dB/m @ 33 MHz
	< 0,45 dB/m @ 66 MHz

ACCORDING TO THE STANDARD

According Open Alliance, V2.0 (BroadR-Reach)

Type	Conductor				Cable		
	Geometry			Resistance (20°C)	Geometry		
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Lay length
	[mm²]	N x Ømax.[mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]
COFDATA 100 UUTP ETH 105 - 2	2 x 0,35	7 x 0,26	0,80	52	0,20	1,2 – 1,3	15 ± 2

Cable type		
Type	Cross-section	Weight approx.
	[mm²]	[g/m]
COFDATA 100 UUTP ETH 105 - 2	2 x 0,35	9,1

COFDATA 100 UUTP ETH 125

-40°C to 125°C

DESIGN

Conductor:	CU ETP1 EN 13602, bare
Insulation material:	Polypropylene low Halogenated
Covering:	reduced wall thickness

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 125°C / 3000h
Characteristic impedance (at 20°C):	100 ± 10 Ω
Insertion loss (at 20°C):	< 0,06 dB/m @ 1 MHz < 0,16 dB/m @ 10 MHz < 0,31 dB/m @ 33 MHz < 0,45 dB/m @ 66 MHz

ACCORDING TO THE STANDARD

According client´s specifications

Type	Conductor				Cable		
	Geometry			Resistance (20°C)	Geometry		
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Lay length
	[mm²]	N x Ømax.[mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]
COFDATA 100 UUTP ETH 125	2 x 0,35	7 x 0,26	0,8	52 55*	0,2	1,20 – 1,30	13 ± 2

Cable type		
Type	Cross-section	Weight approx.
	[mm²]	[g/m]
COFDATA 100 UUTP ETH 125	2 x 0,35	8,9

*Maximum resistance after twisted

ETHERNET CABLES
JACKETED UNSHIELDED

COFDATA 100 JUTP ETH 105-1 46
COFDATA 100 JUTP ETH 125 47
COFDATA 100 JUTP ETH 125-4 48
COFDATA 100 JUTP ETH 125-7 49

COFDATA 100 JUTP ETH 105 - 1

-40°C to 105°C

DESIGN

Conductor:	Strands of copper alloy CuMg0,2 alloy; IACS 75% Mg content 0,2 ±0,06%
Insulation material:	Polypropylene low halogenated
Jacket material:	Polypropylene low halogenated

CONSTRUCTION

Polypropylene jacketed cable with twisted polypropylene single cores.

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 105°C / 3000h
Characteristic impedance (at 20°C):	100 ± 10 Ω
Insertion loss (at 20°C):	< 0,06 dB/m @ 1 MHz < 0,16 dB/m @ 10 MHz < 0,31 dB/m @ 33 MHz < 0,45 dB/m @ 66 MHz

ACCORDING TO THE STANDARD

According Open Alliance, V2.0 (BroadR-Reach)
VW N 108 293

Type	Conductor				Core		Cable		
	Geometry			Resistance (20°C)	Geometry		Geometry		
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Lay length	Wall thickness min.	Diameter nom.
	[mm²]	N x Ømax.[mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	[mm]	[mm]
COFDATA 100 JUTP ETH 105 - 1	2 x 0,13	7 x 0,17	0,55	175,1*	0,15	0,8 – 1,0	15 ±2	0,45	3,05 – 3,35

Cable type		
Type	Cross-section	Weight approx.
	[mm²]	[g/m]
COFDATA 100 JUTP ETH 105 - 1	2 x 0,13	12

*Resistance after twist

COFDATA 100 JUTP ETH 125

-40°C to 125°C

DESIGN

Conductor:	Strands of copper alloy CuSn0,3 alloy; IACS 72% Sn content 0,3 ±0,05%
Insulation material:	PP
Jacket Material:	TPE-S

CONSTRUCTION

TPE-S jacketed cable with twisted PP single cores.

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 125°C / 3000h
Characteristic impedance:	100 ± 10 Ω
Insertion Loss:	< 0,06 dB/m @ 1 MHz < 0,16 dB/m @ 10 MHz < 0,31 dB/m @ 33 MHz < 0,45 dB/m @ 66 MHz
Min. Bending radius:	3xD (static)

ACCORDING TO THE STANDARD

According Open Alliance, V2.0 (BroadR-Reach)
Daimler H35/21

Type	Conductor				Core		Cable		
	Geometry			Resistance (20°C)	Geometry		Geometry		
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness nom.	Diameter	Lay length nom.	Wall thickness min./nom.	Diameter
	[mm²]	N x Ømax.[mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	[mm]	[mm]
COFDATA 100 JUTP ETH 125	2 x 0,13	7 x 0,158	0,49	175	0,19	0,8 – 0,9	23	0,55/0,75	3,1 – 3,3

Cable type				
Type	Cross-section	Lay length nom.	Color	Weight approx.
	[mm²]	[mm]		[g/m]
COFDATA 100 JUTP ETH 125	2 x 0,13	23	BK_WH-LGN	12

COFDATA 100 JUTP ETH 125 - 4

-40°C to 125°C

DESIGN

Conductor:	CU ETP1 according to EN 13602, tinned
Insulation material:	PP
Jacket Material:	TPE-S

CONSTRUCTION

TPE-S jacketed cable with twisted PP single core.

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 125°C / 3000h
Characteristic Impedance (at 20°C):	100 ± 10 Ω
Insertion Loss:	< 0,06 dB/m @ 1 MHz < 0,16 dB/m @ 10 MHz < 0,31 dB/m @ 33 MHz < 0,45 dB/m @ 66 MHz

APPLICATION

Data cable for 100 Mb/s Ethernet.

ACCORDING TO THE STANDARD

VW N 108 572
Open Alliance BR TC2

Type	Conductor				Core		Cable		
	Geometry			Resistance (20°C)	Geometry		Geometry		
	Cross-section	Construction	Diameter max.	Tinned max.	Wall thickness min.	Diameter	Lay length	Wall thickness min.	Diameter
	[mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	[mm]	[mm]
COFDATA 100 JUTP ETH 125 - 4	2x0,35sn-A	7 x 0,27	0,8	55,5	0,2	1,3 -0,1	30±5	0,5	4,15 -0,3

Cable type				
Separating Agent	Type	Cross-section	Color	Weight approx.
		[mm²]		[g/m]
Powder	COFDATA 100 JUTP ETH 125 – 4	2x0,35sn-A	According to the order	20
PET foil	COFDATA 100 JUTP ETH 125 – 4F			

COFDATA 100 JUTP ETH 125 - 7

-40°C to 125°C

DESIGN

Conductor:	Strands of copper alloy CuSn0,3 alloy; IACS 72% Sn content 0,3 ±0,05%
Insulation material:	Polypropylene
Jacket material:	TPE-S

CONSTRUCTION

TPE-S jacketed cable with twisted polypropylene single cores.

ACCORDING TO THE STANDARD

According Open Alliance, V2.0 (BroadR-Reach)

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 125°C / 3000h
Characteristic impedance (at 20°C):	100 ± 10 Ω
Insertion loss (at 20°C):	< 0,06 dB/m @ 1 MHz < 0,16 dB/m @ 10 MHz < 0,31 dB/m @ 33 MHz < 0,45 dB/m @ 66 MHz

Type	Conductor				Core		Cable		
	Geometry			Resistance (20°C)	Geometry		Geometry		
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Lay length nom.	Wall thickness min.	Diameter
	[mm²]	N x Ømax.[mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	[mm]	[mm]
COFDATA 100 JUTP ETH 125 - 7	2 x 0,13	7 x 0,158	0,49	170	0,15	0,90 – 1,00	15	0,45	3,05 – 3,35

Cable type			
Type	Cross-section	Lay length nom.	Weight approx.
	[mm²]	[mm]	[g/m]
COFDATA 100 JUTP ETH 125 - 7	2 x 0,13	15	12

ETHERNET CABLES
JACKETED SHIELDED

COFDATA 100 JSTP ETH 105 51
COFDATA 100 JSTP ETH 105-2 52
COFDATA 100 JSTP ETH 105-3 53
COFDATA 100 JSTP ETH CPP 54

COFDATA 100 JSTP ETH 105

-40°C to 105°C

DESIGN

Conductor:	Strands of copper alloy CuSn0,3 alloy; IACS 72% Sn content 0,3 ±0,05%
Insulation material:	Polypropylene
Inner material:	Polypropylene
Jacket material:	Plasticized polyvinyl chloride

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 105°C / 3000h
Characteristic impedance (at 20°C):	100 ± 5 Ω
Insertion loss (at 20°C):	< 0,037 dB/m @ 1 MHz < 0,106 dB/m @ 10 MHz < 0,344 dB/m @ 100 MHz < 0,896 dB/m @ 600 MHz

CONSTRUCTION

Multi-core cable with an inner jacket, tape, copper braid and jacketed.

SCREENING

Screening with tinned copper braid and aluminium/PET foil.

ACCORDING TO THE STANDARD

Similar to Open Alliance 1000BASE-T1 Link Segment Type A, V2.0
VW N 108 574

Type	Conductor				Core			Inner Sheath		Screen		Cable	
	Geometry			Resistance (20°C)	Geometry			Geometry				Geometry	
	Cross-section	Construction	Diameter max.	Bare max.	Wall thickness min.	Diameter	Lay length nom.	Wall thickness nom.	Diameter	Construction	Coverage nom.	Wall thickness nom.	Diameter
	[mm²]	N x Ø max. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	[mm]	[mm]	N x N x Ø max.	%	[mm]	[mm]
COFDATA 100 JSTP ETH 105	2 x 0,13	7 x 0,158	0,49	170	0,20	0,9 – 1,0	30	0,45	2,6 – 3,0	16 x 7 x 0,11	85	0,40	3,9 – 4,3

Cable type		
Type	Cross-section	Weight approx.
	[mm²]	[g/m]
COFDATA 100 JSTP ETH 105	2 x 0,13	27

COFDATA 100 JSTP ETH 105 - 2

-40°C to 105°C

DESIGN

Conductor:	CU ETP1 EN 13602, tinned
Insulation material:	PP foamed
Jacket material:	Plasticized polyvinyl chloride

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 105°C / 3000h
Characteristic impedance (at 20°C):	100 ± 5 Ω
Insertion loss (at 20°C):	<1,273dB/m @ 1000 MHz
	<1,886dB/m @ 2000 MHz
	<2,396dB/m @ 3000 MHz
	<3,102dB/m @ 4600 MHz
Shielding attenuation:	≥ 50 dB

CONSTRUCTION

Multi-core cable with tape, copper braid and outer jacket.

SCREENING

Screening with Al/PET/Al foil and tinned copper braid.

ACCORDING TO THE STANDARD

According client´s specifications

Type	Conductor				Core			Screen		Cable	
	Geometry			Resistance (20°C)	Geometry					Geometry	
	Cross-section	Construction	Diameter max.	Tinned max.	Wall thickness min.	Diameter	Lay length	Construction	Coverage nom.	Wall thickness nom.	Diameter
	N x [mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	N x N x Ømax.	%	[mm]	[mm]
COFDATA 100 JSTP ETH 105 - 2	2 x 0,14 sn	7 x 0,17	0,55	125*	0,28	1,20 – 1,26	22 ±3	16 x 6 x 0,11	90	0,26	3,6 – 4,0

Cable type		
Type	Cross-section	Weight approx.
	N x [mm²]	[g/m]
COFDATA 100 JSTP ETH 105 - 2	2 x 0,14 sn	21

*For the single wire not twisted

COFDATA 100 JSTP ETH 105 - 3

-40°C to 105°C

DESIGN

Conductor:	CU ETP1 according to EN 13602, tinned
Insulation material:	PP foamed
Jacket Material:	Plasticized polyvinyl chloride

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 105°C / 3000h
Characteristic impedance (at 20°C):	100 ± 5 Ω
Insertion loss (at 20°C):	<0,0397dB/m @ 1 MHz <0,115dB/m @ 10 MHz <0,370dB/m @ 100 MHz <0,958dB/m @ 600 MHz
Shielding attenuation:	≥ 35 dB

CONSTRUCTION

Multi-core cable with tape, copper braid and outer jacket.

SCREENING

Screening with Al/PET/Al foil and tinned copper braid.

ACCORDING TO THE STANDARD

According client´s specifications

Type	Conductor				Core			Screen		Cable	
	Geometry			Resistance (20°C)	Geometry					Geometry	
	Cross-section	Construction	Diameter max.	Tinned max.	Wall thickness min.	Diameter	Lay length nom.	Construction	Coverage nom.	Wall thickness nom.	Diameter
	N x [mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	N x N x Ømax.	%	[mm]	[mm]
COFDATA 100 JSTP ETH 105 - 3	2 x 0,14 sn	7 x 0,17	0,55	125*	0,28	1,20 – 1,26	25	16 x 6 x 0,11	87	0,26	3,6 – 4,0

Cable type		
Type	Cross-section	Weight approx.
	N x [mm²]	[g/m]
COFDATA 100 JSTP ETH 105 - 3	2 x 0,14 sn	21

*For the single wire not twisted

COFDATA 100 JSTP ETH CPP

-40°C ... 125°C

DESIGN

Conductor:	CU ETP1 acc. to EN 13602, tinned
Insulation material:	PP foamed
Jacket Material:	Polyurethane

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C ... 125°C/3000h
Thermal overload:	max. 155°C
Min. bending radius:	5xD (static)
Characteristic impedance:	100 Ω ± 10
Screening Attenuation:	≥ 55dB
Return Loss @ 20ºC:	> 20 dB @ 1 MHz > 20 dB @ 33 MHz > 14,8 dB @ 66 MHz

CONSTRUCTION

Multi-core cable, tape, copper braid and jacketed.

SCREENING

Screening with tinned copper braid and aluminium/PET foil.

ACCORDING TO THE STANDARD

According client´s specifications
According Open Alliance, V2.0 (BroadR-Reach)

Type	Conductor				Core			Screen		Cable		
	Geometry			Resistance (20°C)	Geometry					Geometry		
	Cross-section	Construction	Diameter max.	Tinned max.	Wall thickness nom.	Diameter	Lay length nom.	Construction	Coverage nom.	Wall thickness		Diameter
	[mm²]	N x Ømax. [mm]	[mm]	[mΩ/m]	[mm]	[mm]	[mm]	N x N x Ømax. [mm]	[%]	min. [mm]	nom. [mm]	[mm]
COFDATA 100 JSTP ETH CPP	2 x 0,35 sn	7 x 0,26	0,80	55,5	0,60	1,95 ±0,05	40	16 x 9 x 0,11	85	0,60	0,80	6,00 ±0,2

Type	Attenuation (dB/100m)								
	Frequency (MHz)								
	1	10	33	66	-	-	-	-	-
COFDATA 100 JSTP ETH CPP	4	10,6	20,4	30,2	-	-	-	-	-

Cable type			
Type	Cross-section [mm²]	Color of sheath	Weight approx. [g/m]
COFDATA 100 JSTP ETH CPP	2 x 0,35 sn	According to the order	41

HSD CABLES

COFDATA 100 HSD 105 (FL9YBC11Y SN) 59

COFDATA 100 HSD 105- 1 (FL9YBC11Y SN) 60

COFDATA 100 HSD 105

(FL9YBC11Y Sn (3 GHz))

-40°C ... 105°C

DESIGN

Conductor:	CU ETP1 according to EN13602, tinned
Insulation material:	Polypropylene (PP)
Filler:	Polypropylene strand, (PPS) $D_0 \approx$ 0,5mm
Jacket Material:	Polyurethane (PUR)

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C ... 105°C/3000h ... 130°C/240h
Characteristic impedance:	100 ± 6 Ω
Capacitance (at 1kHz):	≤55 pF/ m
Screening attenuation:	≥ 55 dB up to 20 MHz ≥ 40 dB up to 3 GHz

CONSTRUCTION

High speed cables twisted, tape, copper braid and jacketed.

SCREENING

AL/PET/AL foil.
Screening with tinned copper braid.

APPLICATION

High speed data cables.

ACCORDING TO THE STANDARD

Daimler H37/1
VW N 107 997
BMW 6 946 298 (9 367 798.9)

Type	Conductor				Core		Screen		Cable		
	Geometry			Resistance (20°C)	Geometry				Geometry		
	Cross-section	Construction	Diameter max.	Tinned max.	Wall thickness min.	Diameter	Construction	Coverage min.	Lay length	Wall thickness min.	Diameter
	[mm²]	N x Ømax.[mm]	[mm]	[mΩ/m]	[mm]	[mm]	N x N x Ømax.	%	[mm]	[mm]	[mm]
FL9YBC11Y Sn	4 x 0,14	7 x 0,16	0,48	125	0,27	1,15 – 1,25	16 x 8 x 0,11	92	30 ± 5	0,41	4,4 – 4,8

Cable type			
Type	Cross-section	Color	Weight approx.
	[mm²]		[g/m]
FL9YBC11Y Sn	4 x 0,14	BK_BN-LGN-OR-BU	29

COFDATA 100 HSD 105-1

(FL9YBCY Sn (3 GHz))

-40°C to 105°C

DESIGN

Conductor:	CU ETP1 according to EN13602, tinned
Insulation material:	Polypropylene (PP)
Filler:	Polypropylene strand, (PPS) D_0≈ 0,5mm
Jacket Material:	Plasticized PVC

TECHNICAL DATA

Voltage level:	60V
Temperature range:	-40°C to 105°C / 3000h to 130°C / 240h
Characteristic impedance:	100 ± 6 Ω
Capacitance (at 1kHz):	≤55 pF/ m
Screening attenuation:	≥ 40 dB up to 3 GHz

CONSTRUCTION

Data twisted cable with shielding tape, tinned copper braid and jacket.

SCREENING

AL/PET/AL foil.
Screening with tinned copper braid.

APPLICATION

High speed data cable.

ACCORDING TO THE STANDARD

According client's specification
BMW 6 946 298 (6 821 073.9)
Stellantis MS.90534

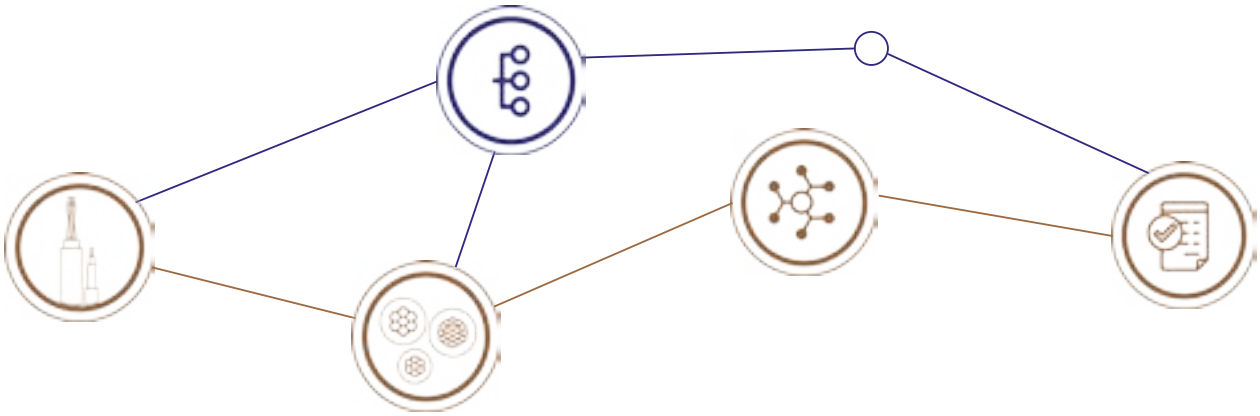
Type	Conductor				Core		Screen		Cable		
	Geometry			Resistance (20°C)	Geometry				Geometry		
	Cross-section	Construction	Diameter max.	Tinned max.	Wall thickness min.	Diameter	Construction	Coverage min.	Lay length	Wall thickness min.	Diameter
	[mm²]	N x Ømax.[mm]	[mm]	[mΩ/m]	[mm]	[mm]	N x N x Ømax.[mm]	%	[mm]	[mm]	[mm]
FL9YBCY Sn	4 x 0,14	7 x 0,16	0,48	125	0,27	1,15 – 1,25	16 x 8 x 0,11	92	30 ± 5	0,41	4,4 – 4,8

COFDATA 100 HSD 105-1 (FL9YBCY Sn (3 GHz))	
Frequency (MHz)	Attenuation (dB/m) max.
250	0,5
400	0,7
500	0,8
800	1,05
1000	1,2
1500	1,6
2000	2,0
2500	2,5
3000	2,9

Cable type			
Type	Cross-section	Color of sheath	Weight Approx.
	[mm²]		[g/m]
FL9YBCY Sn	4 x 0,14	According to the order	34

TECHNICAL INFORMATION

OUR PRODUCT RANGE



CABLES	CROSS SECTIONS & CONDUCTORS	INSULATION MATERIALS	SPECIFICATIONS
Primary	Copper	PVC	ISO
Battery	0,14mm² - 120mm²	PA	FORD
Multicore		PP	GMW
High Temperature	Copper Alloys	PUR	FCA
High Voltage	(CuSn, CuMg, CuAg)	TPE	LV 112
Data	0,08mm² - 0,75mm²	XLPE	VW
Customized		XLPO	DAIMLER
	Aluminum	ETFE	BMW
	1,50mm² - 120mm²	FEP	JASO
		SiR	SAE
			PSA
			Renault
			UL

THIS DOCUMENT

concerns specifically COFData brand, which is dedicated to cables for connectivity.
To consult other brands of our wide product range, please ask for the related catalogs or Technical Datasheets at customeronlinerequest@coficab.com

We offer a wide range of products through several brands corresponding to the different applications and requirements that you need.

OUR PRODUCT RANGE

GENERAL PURPOSE

COFICAB designs and manufactures a wide range of electric cables for light and commercial vehicles' power and signal circuits.

e-COF

COFICAB designs and manufactures high voltage cables for ELECTROMOBILITY.

e-COF Charge

COFICAB designs and manufactures CHARGING cables for ELECTROMOBILITY, according to the plugins in the market.

COF Data

COFICAB designs and manufactures high transmission rate cables suitable for multimedia systems applications

COF Sense

COFICAB designs and manufactures specific cables for safety and security applications on the vehicle.

COF Flex

As an answer to the demand of the market in terms of flexibility, price, temperature performance and resistance to fluids, COFICAB developed an extra flexible polyolefin based insulation material.

COF Skinny

COFICAB designs and manufactures small cross-section cables from 0.08 mm^2 to 0.22mm^2

COF Alu

COFICAB designs and manufactures cables with aluminium and aluminium alloys conductor, which are typically used to reduce weight in vehicles.

COF Heat

COFICAB develops and manufactures high-temperature resistant cables for applications in or near the engine compartment where high temperatures occur. High-temperature performance may lead to cross-section reduction.

SPECIFIC APPLICATIONS

COFICAB designs and manufactures solutions for different specific applications.

TAILOR MADE

COFICAB designs and manufactures customized cables and wires based on specific customer requests.

TRUCKS

COFICAB designs, and manufactures single and multicore electric cables for Trucks, in accordance with customer standards and drawings, in all cross-sections and temperature classes.

APPLIANCES & ENERGY

COFICAB designs and manufactures cables for internal wiring of appliances, panels and power distribution.

WE CAN PRODUCE ALL CROSS-SECTIONS AND TEMPERATURE RANGES, ACCORDING TO OUR CUSTOMER NEEDS.

TECHNICAL INFORMATION

Cable type code according to DIN 76722

The abbreviation code describes the cable construction, from inside to outside. The code block always starts with one of the following character groups, depending on the nominal voltage:

CODE	MEANING
FL	**Vehicle cable** - voltage class A as defined in ISO 6469-3
FHL	**Vehicle high-voltage cable** - voltage class B as defined in ISO 6469-3

Special design feature codes

Where necessary, the code for special design features is placed directly after the cable type code.

CODE	MEANING
F	**Flat cable**
K	**Compressed conductor**

Conductor material codes

Where necessary, the conductor material code is placed after the cable type code and the code(s) identifying special design features. No code is used for copper conductors. Other conductor materials shall be identified by the codes listed in Table:

CODE	MEANING
Al	**Aluminium**
CuSn03	**Copper-tin alloy**
CuMg02	**Copper-magnesium alloy**
M	**Other conductor materials**

Insulation wall thickness

Where necessary, the code for the insulation wall thickness is placed after the codes for cable type, conductor material and special design features.

CODE	MEANING
R	**Reduced insulation thickness** (“thin wall” as defined in ISO 19642)
U	**Ultra-reduced insulation thickness** ("ultra-thin wall" as defined in ISO 19642)
S	**Special insulation thickness**
no code	**Thick-walled insulation** ("thick wall" as defined in ISO 19642)

Insulation and sheath materials

The code for insulation materials is placed after the codes for cable type, conductor material, special design features and insulation wall thickness.

CODE	MEANING
Y	**PVC** (polyvinyl chloride)
2Y	**PE** (polyethylene)
4Y	**PA** (polyamide)
6Y	**FEP** (tetrafluorethylene/hexafluorpropylene)
7Y	**E-TFE** (ethylene/tetrafluorethylene)
9Y	**PP** (polypropylene)
11Y	**TPE-U** (thermoplastic polyurethane, PUR)
13Y	**TPE-E** (thermoplastic polyester elastomer)
31Y	**TPE-S** (thermoplastic styrol-block-copolymer)
51Y	**PFA** (perfluoroalkoxy alkane)
91Y	**TPE-O** (thermoplastic polyolefin elastomer) **COFFLEX**
2G	**SiR** (silicone rubber)

Where an “X” is used in the code instead of a “Y”, the respective polymer is used in the cross-linked form. If foamed materials are used, “0” is placed in front of the respective code.

Non-extruded cladding

In the abbreviation code block, the code indicating non-extruded cladding (see Table 6) is placed at the position corresponding to the location of the cladding in the cable structure, beginning from the center outwards.

CODE	MEANING
B	**foil shielding**
C	**braided shielding, metal**
D	**spiral wire (or served) shielding, metal**

Number of cores, nominal conductor cross section, specific DC resistance per unit length

The information on the number of cores, the nominal conductor cross-section and specific DC resistance per unit length (only for resistance cables) is placed at the end of the identification code block and separated from it by a space.

The following information is to be provided in the following order:

a) for single-core cables and cores in multicore cables:

1) the nominal cross-sectional area in mm^2;
2) if there are special requirements on flexibility, the maximum individual strand diameter can be specified after the nominal cross-section and separated from this by a slash;
3) if wires with coated surfaces are used, the code for the coating material shall be appended to the numerical value of the nominal cross-section and/or of the maximum individual strand diameter; and
4) conductor structures can be identified in accordance with ISO 6722 (all parts) by the letter A (for symmetrical), B (for asymmetrical) or C (for asymmetrical, fine strands);

b) for multicore cables:

1) the number of cores;
2) the nominal cross-sectional area in mm^2;
3) the maximum diameter of a single strand, if there are special requirements for conductor flexibility and
4) if wires with coated surfaces are used, the code for the coating material;

c) for resistance cables, the specific DC resistance per unit length shall be specified, in mΩ/m, after the nominal cross-sectional value.

Conductor structures and surface coatings

CODE	MEANING
A	**symmetrical structure** as specified in ISO 19642 (all parts)
B	**asymmetrical structure** as specified in ISO 19642 (all parts)
C	**asymmetrical structure** as specified in ISO 19642 (all parts), with fine strands
Sn	**tin-coated wire surface**

Continuous operating temperature (temperature class rating)

The continuous operating temperature rating as determined in accordance with ISO 19642 (all parts) shall be entered at the end of the abbreviation code block and separated from it by a space. The letter T is used to indicate the temperature, followed by the respective rating value in °C.

Colour identification

Colours are to be coded in accordance with DIN 72551-7.

Nominal voltage

In the case of high-voltage cables for vehicles, the nominal voltage is stated in kV (AC/DC), and the value is entered after the temperature value and separated from this by a slash.

COFICAB type code – Coaxial cables

The abbreviation code describes the COFICAB brand, characteristic impedance, cable type and continuous operation temperature.

CODE	MEANING
COFDATA	**Brand name** – Data cables for connectivity
50	**Characteristic impedance** 50 Ω
031	**Cable type** according to RTK031
174	**Cable type** according to RG174
058	**Cable type** according to RG58
1.5DS	**Cable type** according to 1.5DS-QFB(TA)/ 1.5DS-GEC (TIN)
2DS	**Cable type** according to 2DS-PPFW(TA)
20G	**Cable type** up to 20GHz
105	**Temperature** class up to 105°

Where an "X" is used in the code, the respective polymer is used in the cross-linked form. If "L" is used in the code, it´s a low loss version.
When an "number" is used at the end of the code, is related to another specific type of cable.

COFICAB type code – Ethernet cables

The abbreviation code describes the COFICAB brand, characteristic impedance, construction, application and continuous operation temperature.

CODE	MEANING
COFDATA	**Brand name** – Data cables for connectivity
100	**Characteristic impedance** 100 Ω
JSTP	**Jacketed, Shielded, Twisted Pair**
JUTP	**Jacketed, Unshielded, Twisted Pair**
UUTP	**Unjacketed, Unshielded, Twisted Pair**
ETH	**Ethernet application**
CPP	**PP foamed** insulation
105	**Temperature** class up to 105°
125	**Temperature** class up to 125°
150	**Temperature** class up to 150°

When an "number" is used at the end of the code, is related to another specific type of cable.

Conductor materials

Most of our conductor material of COFDATA cables is Copper Cu-ETP1.
We also process a variety of copper alloys for special applications.

Temperature class

TEMPERATURE CLASS	CODE	OPERATING TEMPERATURE	
		LONG-TERM USE (3000h)	SHORT-TERM USE (240h)
A	T1	-40°C to +85°C	to +110°C
B	T2	-40°C to +105°C	to +130°C
C	T3	-40°C to +125°C	to +150°C
D	T4	-40°C to +150°C	to +175°C
E	T5	-40°C to +175°C	to +200°C
F	T6	-40°C to +200°C	to +225°C

Standards

COFDATA cables fulfill global standards like:

- Open Alliance 100Base-T1
- Open Alliance 1000Base-T1
- DIN 76722
- EN 50289-1 (all parts)
- EN 50117-1
- IEC 62153-4-3
- LV 213-1
- LV 213-2
- SAE J3117
- SAE J2284-5

We also fulfill specific customer requests.

Our laboratory performs the full range of test scopes to secure top-level products.

Environmental properties

In conformity with EU End-of-life Directive 2000/53/EC (EU End-of-life Vehicle Directive) and EU RoHS Directive 2011/65/EU (amended by 2015/863)
In conformity with REACH Regulation (EC) No 1907/2006
No content of restricted substances acc. to VDA 232-101

Printing

According to OEM applicable standard.

Applications

• CAN twisted pairs for data rates up to 1 Mbps for serial bus system for networking of sensor/actuator systems.

• CAN-FD cables with or without jacket to be used in CAN network and sensor/actuator components for data rates up to 5 Mbps.

• FlexRay cables for data rates up to 10 Mbps, applications are driver assistance, by-wire systems and powertrain.

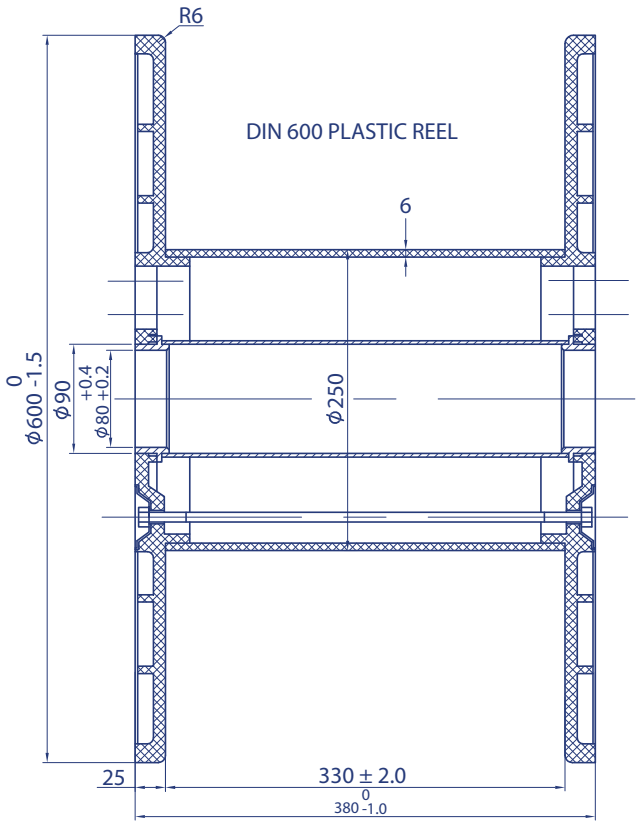
• Ethernet cables with different speed of transmission for cameras, video entertainment, driver information systems, video navigation, digital video recognition and monitoring chassis/safety systems, comfort, infotainment and ADAS systems:

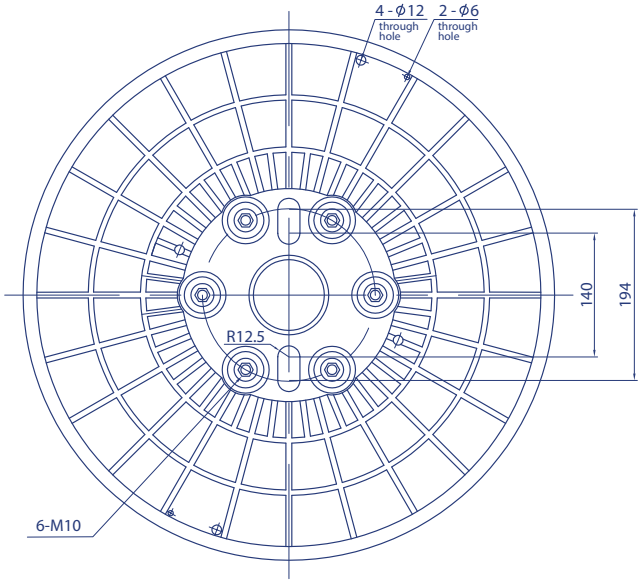
- 100 Mbps acc. to OABR TC2,
- 1 Gbps acc. to OABR TC9
- Multi Gbps

• COAX cables with foamed or solid dielectrics for antennas, GPS, and cameras.

Packaging information

COFICAB offers tailor made packaging units, depending on customer requirements, under agreement.
The typical packaging unit used for COFDATA cables is DIN 600, in plastic reel according to the drawing below:





COFICAB WORLDWIDE

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EM 531
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SPAIN
Calle José Maria Escuza, 20, 1ª 48018 Bilbao - SPAIN

INDIA

OUR ADVANCED DELIVERY CENTERS

TUNISIA
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NORTH MACEDONIA
Industriska no. 2, 1430 Kavadarci - REPUBLIC OF NORTH MACEDONIA

MOROCCO
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Tunisia: Two Manufacturing Sites in Tunis and in Medjez El Beb, Center of Excellence in Tunis, Advanced Delivery Center in Sousse

Morocco: Two Manufacturing Sites in Tanger and in Kenitra, Advanced Delivery Center in Tanger

Deutschland: Sales and R&D Office in Nuremberg

Portugal: Two Manufacturing Sites in Guarda, Center of Excellence in Guarda

Spain: Sales and Representation Office in Bilbao

Romania: Two Manufacturing Sites in Arad and in Ploiesti

Serbia: Manufacturing Site in Belgrade

North Macedonia: Advanced Delivery Center in Kavadarci

China: Manufacturing Site in Tianjin, Sales Office in Shanghai

USA: Sales and R&D Office in Detroit Sales Office in El Paso.

Mexico: Three Manufacturing Sites in Durango, Leon and Juarez, Center of Excellence in Juarez

Honduras: Manufacturing Site in San Pedro Sula

India: Sales and Representation Office

OUR FOOTPRINT

- **MANUFACTURING SITE**
- **ADVANCED DELIVERY CENTER**
- **R&D CENTER OF EXCELLENCE**
- **SALES & CUSTOMER TECHNICAL SUPPORT OFFICE**
- **SALES & REPRESENTATION OFFICE**

COFICAB CAN ENSURE THE SAME PRODUCT PORTFOLIO GLOBALLY AND AVOIDS OVERSEAS SHIPMENTS.

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This document concerns specifically COFData brand,
which is dedicated to cables for connectivity.
To consult other brands of our wide product range,
please ask for the related catalogs or Technical Datasheets at:

customeronlinerequest@coficab.com

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3rd Edition | September 2025

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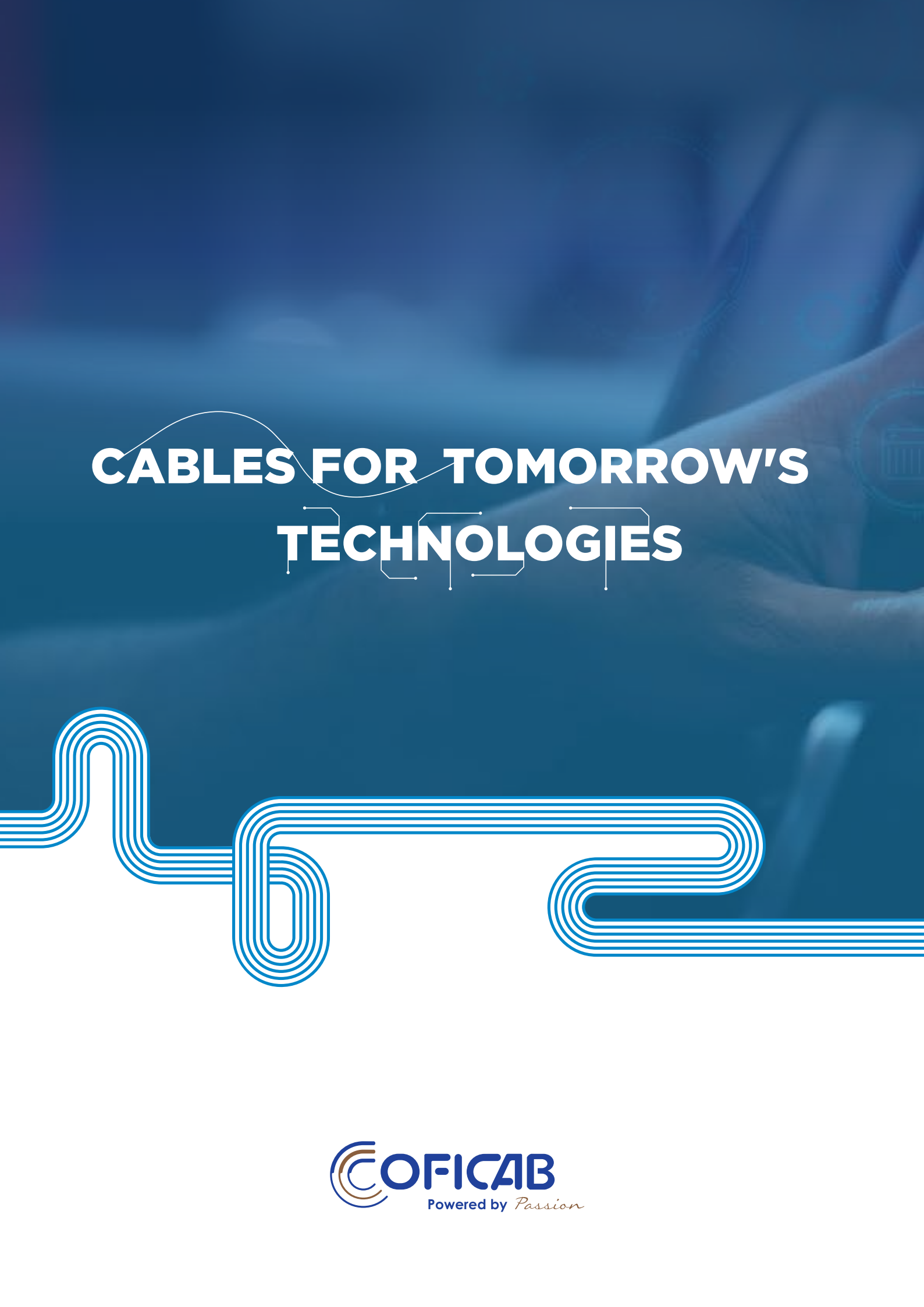

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