



PROFIBUS 637 UL approval



ELETTROTEK KABEL® PROFIBUS 637

Construction:

CONDUCTOR:	SOLID (39141) OR STRANDED (39140) RED COPPER CONDUCTOR 7X0,25 mm -22/7 AWG
INSULATION:	SPECIAL PE COMPOUND ACC. TO DIN VDE 0819 PART 103
COLOUR CORES:	RED, GREEN
STRANDING:	IN LAYERS
SCREEN:	ALUMINIUM TAPE AND TINNED COPPER BRAID
OUTER SHEATH:	VIOLET (RAL 4001 OR 4005), PVC OIL RESISTANT COMPOUND, ACC. TO DIN VDE 0281 PART 1

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
IEC 60332-1-2
EN 60332-1-2



OIL RESISTANCE ACC. TO:
DIN VDE 0281 PART 1
DIN VDE 0473 PART.811-2-1
DIN VDE 0207 PART. 5



UV RESISTANCE ACC. TO:
UL1581 §1200 STD.

Technical data:

PEAK OPERATING VOLTAGE:	MAX. 350 V
UL VOLTAGE:	(PROFIBUS 637): 300 V
TEST VOLTAGE:	1,5 kV
TEMPERATURE RANGE	(PROFIBUS 637): UL: UP TO +80°C
FIXED LAYING:	-30°C UP TO +80°C
FLEXIBLE INSTALLATION:	-5°C UP TO +80°C
MIN. BENDING RADIUS:	12 x D
CHARACTERISTIC IMPEDANCE 3-20 MHz:	150 Ω ± 10%

Features:

UL STYLE: AWM STYLE 2571 80°C 300V

ROHS AND CE APPROVAL



Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no. *)
39140CVB020A22	2 x 0,34	7,3	23,8	53	22
39141CVB020A22	2 x 0,34	7,3	23,8	53	22

Other dimension and colours available on request.

SPECIAL PROFIBUS 634 UL, UL approval, for cable tracks



ELETTROTEK KABEL* SPECIAL PROFIBUS 634 UL

Construction:

CONDUCTOR:	0,34 mm²: FLEXIBLE RED COPPER CONDUCTOR, 19X0,16 mm - 22/19 AWG ACC. TO DIN VDE 0812 0,75 mm²: FLEXIBLE RED COPPER CONDUCTOR CL. 6, ACC TO IEC 60228, DIN VDE 0295 42X0,15 mm - AWG 19/42
INSULATION:	0,34 mm²: SPECIAL PE COMPOUND 0,75 mm²: SPECIAL PP COMPOUND
COLOUR CORES:	0,34 mm²: RED, GREEN 0,75 mm²: BROWN, LIGHT BLUE AND GREEN-YELLOW
STRANDING:	0,34 mm²: IN PAIR + PE FILLERS 0,75 mm²: IN LAYERS + FILLERS
SCREEN:	0,34 mm²: ALUMINIUM TAPE + PETP FOIL AND TINNED COPPER BRAID
WRAPPING:	0,34 mm²: NON-WOVEN TAPE 0,75 mm²: NON-WOVEN TAPE
OUTER SHEATH:	VIOLET (RAL 4001 OR 4005), PUR COMPOUND

Technical data:

PEAK OPERATING VOLTAGE:	MAX. 350 V
VOLTAGE UL:	300 V
TEST VOLTAGE:	1,5 kV
TEMPERATURE RANGE	-40°C UP TO +80°C
MIN. BENDING RADIUS:	
FIXED LAYING:	10 x D
FLEXIBLE INSTALLATION:	15 x D
MAX SPEED (MAIN APPLICATION):	250 m/min

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
UL 1581 1061,
IEC 60332-1-2
EN 60332-1-2



OIL RESISTANCE ACC. TO:
IEC 60811-2-1
ICEA 5-82-552 AND ASTM OIL 1



HALOGEN-FREE ACC. TO:
IEC 60754-1
EN 50267-2-1



CORROSIVENESS OF CONFLAGRATION GASES ACC. TO:
IEC 60754-2 AND EN 50267-2-2 + VDE 0482 PART 267-2-2
NO DEVELOPMENT OF CORROSIVE CONFLAGRATION GASES



UV RESISTANCE ACC. TO:
UL1581 §1200 STD.

Features:

AWM STYLE 10493 - 20233 80°C 300 V

PROFIBUS DP TYPE A

FOR SPEED AND MINIMUM BENDING RADIUS
SEE PAGES FROM 1 TO 4 OF CATALOGUE

ROHS AND CE APPROVAL



Electrical and Transmission proprieties at 20°C PROFIBUS UL

Profinet bus

MAX. DC COND. RESISTANCE	59,4 Ω x km
MAX. CAPACITANCE AT 800 Hz	30 nF/km
IMPEDANCE AT 800 1-20 MHz	150 Ω (± 10%)
MAX. ATTENUATION AT 9,6 KHz	4,2 dB/km
MAX. ATTENUATION AT 38,4 KHz	5,2 dB/km
MAX. ATTENUATION AT 4 MHz	2,3 dB/km
MAX. ATTENUATION AT 16 MHz	44,0 dB/km
DIELECTRIC STRENGTH (COND/COND/ SHIELD)	1,5 kVAC/1 min.
MIN. INSULATION RESISTANCE	5,0 Ω x km
TRANSFER IMPEDANCE AT 10 MHz	20 MΩ/m

Power conductors

MAX. DC COND. RESISTANCE	26,0 Ω x km
DIELECTRIC STRENGTH (COND/COND)	2,5 kVAC/10 min.
MIN. INSULATION RESISTANCE	5,0 Ω x km

SPECIAL PROFIBUS 634 UL, UL approval, for cable tracks



Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no. *)
39180CVB020M03	2 x 0,34	8	30,9	74	22
39180CV403BM07	2 x 0,34+3 x 0,75	10,4	45	90	22/19

Other dimension and colours available on request.

CAN-BUS 627

UL approval



ELETTROTEKKABEL® CAN-BUS 627 UL

Construction:

CONDUCTOR:	STRANDED RED COPPER CONDUCTOR, 7 x 0,25 mm - 22/7 AWG
INSULATION:	SPECIAL PE COMPOUND, ACC. TO DIN VDE 0207 PART 2
COLOUR CORES:	ACC. TO DIN 47100
WRAPPING:	PETP FOIL
SCREEN:	TINNED COPPER BRAID
OUTER SHEATH:	VIOLET (RAL 4001 OR 4005), PVC OIL RESISTANT COMPOUND, ACC. TO DIN VDE 0281 PART 1

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
IEC 60332-1-2
EN 60332-1-2



OIL RESISTANCE:
VERY GOOD ACC. TO DIN VDE 0207 PART 5

Technical data:

PEAK OPERATING VOLTAGE:	MAX. 350 V
VOLTAGE:	UL: 300 V
TEST VOLTAGE:	1,5 kV
TEMPERATURE RANGE	UL: UP TO +80°C
FIXED LAYING:	-30°C UP TO +70°C
FLEXIBLE INSTALLATION:	-5°C UP TO +70°C
MIN. BENDING RADIUS:	7,5 x D
CHARACTERISTIC IMPEDANCE:	120 Ω (95 - 140 Ω)
RADIATION RESISTANCE:	8 x 10 ⁶ CJ/KG

Features:

UL STYLE: AWM STYLE 2571 80°C 300V CE

ROHS AND CE APPROVAL

GOOD AGAINST ACIDS, ALKALINES, SOLVENTS, HYDRAULIC LIQUIDS ETC.



Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no. *)
39050CV4020A24	2 x 0,25	6	19	44	24
39050CV4020A22	2 x 0,34	6,4	21,8	47	22
39050CV4020A20	2 x 0,5	7,6	28,4	63	20
39050CV4020A19	2 x 0,75	9,6	39,6	93	19
39050CV4022A24	2 x 2 x 0,25	7,1	27,4	57	24
39050CV4022A22	2 x 2 x 0,34	7,7	33,5	66	22
39050CV4022A20	2 x 2 x 0,5	9,5	44,3	98	20
39050CV4022A19	2 x 2 x 0,75	13,5	80,8	174	19

Other dimension and colours available on request.

S CAN-BUS 628

UL approval, halogen-free for cable tracks



ELETTROTEK KABEL® S CAN-BUS 628

Construction:

CONDUCTOR:	FLEXIBLE RED COPPER CONDUCTOR EXTRA FINE WIRES
INSULATION:	SPECIAL PE COMPOUND, ACC. TO DIN VDE 0207 PART 2
COLOUR CORES:	ACC. TO DIN 47100
STRANDING:	IN LAYERS
WRAPPING:	NON-WOVEN TAPEL
Inner sheath:	HALOGEN-FREE COMPOUND
SCREEN:	TINNED COPPER BRAID
OUTER SHEATH:	VIOLET (RAL 4001 OR 4005), PUR TYPE TMPU, ACC. TO DIN VDE 0281 PART 10, (ROUGH SURFACE)

Technical data:

PEAK OPERATING VOLTAGE:	MAX. 350 V
VOLTAGE:	UL: 300 V
TEST VOLTAGE:	1,5 kV
TEMPERATURE RANGE	UL: UP TO +80°C
FIXED LAYING:	- 50°C UP TO + 70°C
FLEXIBLE INSTALLATION:	- 40°C UP TO + 70°C
MIN. BENDING RADIUS:	7,5 x D
MAX SPEED (MAIN APPLICATION):	250 m/min
CHARACTERISTIC IMPEDANCE:	120 Ω (95 - 140 Ω)
RADIATION RESISTANCE:	5 x 10 ⁶ CJ/KG

Resistance:



SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO:
IEC 60332-1-2
EN 60332-1-2



HALOGEN FREE ACC. TO:
DIN VDE 0472 PART 815+IEC 60754-1



CORROSIVENESS OF CONFLAGRATION GASES ACC. TO:
IEC 60754-2 AND EN 50267-2-2 + VDE 0482 PART 267-2-2



OIL RESISTANCE ACC. TO:
DIN VDE 0282 PART 10 + HD 22.10

Features:

AWM STYLE 20233 80°C 300 V

FOR SPEED SEE PAGES FROM 1 AND 2 OF CATALOGUE

ROHS AND CE APPROVAL



Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no.*)
39060CV4020A24	2 x 0,25	7,9	20,2	71	24
39060CV4020A22	2 x 0,34	8,3	22,9	77	22
39060CV4020A20	2 x 0,50	8,7	29,0	74	20
39060CV4022A24	2 x 2 x 0,25	9,1	27,9	90	24
39060CV4022A22	2 x 2 x 0,34	9,6	32,7	97	22
39060CV4022A20	2 x 2 x 0,5	10,6	44,9	94	20

Other dimension and colours available on request.

ASI CABLES

EPDM, PUR, TPE



ELETTROTEKKABEL® ASI CABLES

Construction:

CONDUCTOR:	FLEXIBLE TINNED COPPER CONDUCTOR CL. 5, ACC TO IEC 60228, DIN VDE 0295
INSULATION:	EPDM TYPE: RUBBER COMPOUND PUR TYPE: PUR TYPE PO (UL) TPE TYPE: TPE COMPOUND (UL)
COLOUR CORES:	ACC. TO DIN VDE 0293-308, HD 308 S2
STRANDING:	IN LAYERS
OUTER SHEATH:	YELLOW (RAL 1021) OR BLACK (RAL 9005) EPDM TYPE: RUBBER TYPE EPDM PUR TYPE: PUR COMPOUND (UL) TPE TYPE: TPE COMPOUND (UL)

Features:

AWM STYLE 20549, UL 758, UL 1581 FT2 CSA FT2 (PUR TYPES)
ROHS AND CE APPROVAL

AWM STYLE 21439, UL 758, UL 1581 FT2 CSA FT2 (TPE TYPES)
ROHS AND CE APPROVAL (TPE)



Technical data:

NOMINAL VOLTAGE:	YELLOW: 32 V BLACK: 48 V
TEST VOLTAGE:	1 kV EPDM, PUR TYPES (UL) 1,5 kV TPE TYPE (UL)
TEMPERATURE RANGE	EPDM TYPE: -40°C UP TO +85°C PUR TYPE: -40°C UP TO +85°C (UL) TPE TYPE: -40°C UP TO +105°C (UL)
CONDUCTOR RESISTANCE:	13,7 Ω/km MAX.
INSULATION RESISTANCE:	1 GΩ/km MIN.
MIN. BENDING RADIUS:	EPDM AND PUR TYPES: 30 MM TPE TYPE: 24 MM

Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no.)*
39420AYX020A16	2 x 1,5	-	31	70	16
39420A7X020A16	2 x 1,5	-	31	70	16
39421AYX020A16	2 x 1,5	-	31	64	16
39421A7X020A16	2 x 1,5	-	31	64	16
39422AYX020A16	2 x 1,5	-	31	70	16
39422A7X020A16	2 x 1,5	-	31	70	16

the 5th digit of part number refers to the different material.

0: EPDM
1: PUR
2: TPE

Other dimension and colours available on request.



DEVICENET™ 650 UL approval

DEVICENET™ 651 UL approval



Construction:

CONDUCTOR:	FLEXIBLE TINNED COPPER CONDUCTOR
INSULATION:	1ST PAIR: SPECIAL PE COMPOUND, ACC. TO DIN VDE 0819 PART 103 2ND PAIR: PVC TYPE T12 ACC. TO DIN VDE 0281 PART 1
COLOUR CORES:	SUPPLY PAIR: BLACK AND RED DATA PAIR: WHITE AND LIGHT BLUE
STRANDING:	CORES TWISTED IN PAIRS, PAIRS TWISTED TOGETHER
SCREEN:	PAIRS SCREENED INDIVIDUALLY WITH ALUMINIUM TAPE TINNED COPPER DRAIN WIRE
WRAPPING:	NON-WOVEN TAPE
SCREEN:	(DEVICENET 650): TINNED COPPER BRAID (DEVICENET 651): ALUMINIUM TAPE
OUTER SHEATH:	VIOLET (RAL 4001 OR 4005), PVC TYPE TM1 ACC. TO DIN VDE 0281 PART 1

Technical data:

PEAK OPERATING VOLTAGE:	MAX. 350 V
UL VOLTAGE:	30 V
TEST VOLTAGE:	1,5 kV
TEMPERATURE RANGE	DIN/VDE UL:
FIXED LAYING:	-30 UP TO +70°C UP TO +60 °C
FLEXIBLE INSTALLATION:	-5 UP TO +70°C
MIN. BENDING RADIUS:	
FIXED LAYING:	7,5 x D
FLEXIBLE INSTALLATION:	15 x D
CHARACTERISTIC IMPEDANCE AT 1 MHz:	120 Ω ± 10%

Features:

AWM STYLE 2560 60°C 30 V CE

ROHS AND CE APPROVAL



Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no. *)
39350AVX02BA24	2 x 0,24 + 2 x 0,38	6,5	41,2	74	24/22
39350AVX02BA18	2 x 0,96 + 2 x 1,53	11,5	98,7	166	18/16
39360AVX02BA24	2 x 0,24 + 2 x 0,38	6,5	16,4	57	24/22
39360AVX02BA18	2 x 0,96 + 2 x 1,53	11,5	58,4	116	18/16

Other dimension and colours available on request.

DEVICENET™ 656 halogen-free UL approval
DEVICENET™ 657 halogen-free



ELETTROTEK KABEL® DEVICENET 656



Construction:

CONDUCTOR:	FLEXIBLE TINNED COPPER CONDUCTOR
INSULATION:	1ST PAIR: SPECIAL PE COMPOUND, ACC. TO DIN VDE 0819 PART 103 2ND PAIR: PVC TYPE T12 ACC. TO DIN VDE 0281 PART 1
COLOUR CORES:	SUPPLY PAIR: BLACK AND RED DATA PAIR: WHITE AND LIGHT BLUE
STRANDING:	CORES TWISTED IN PAIRS, PAIRS TWISTED TOGETHER
SCREEN:	PAIRS SCREENED INDIVIDUALLY WITH ALUMINIUM TAPE TINNED COPPER DRAIN WIRE
WRAPPING:	NON-WOVEN TAPE
SCREEN:	(DEVICENET 657): TINNED COPPER BRAID (DEVICENET 656): ALUMINIUM TAPE
OUTER SHEATH:	VIOLET (RAL 4001 OR 4005), HALOGEN FREE COMPOUND

Technical data:

PEAK OPERATING VOLTAGE:	MAX. 350 V
UL VOLTAGE:	(DEVICENET 656): 300 V
TEST VOLTAGE:	1,5 kV
TEMPERATURE RANGE	(DEVICENET 656) UL: UP TO + 75°C
FIXED LAYING:	- 40 UP TO +70°C
FLEXIBLE INSTALLATION:	- 30 UP TO +70°C
MIN. BENDING RADIUS:	
FIXED LAYING:	7,5 x D
FLEXIBLE INSTALLATION:	15 x D
CHARACTERISTIC IMPEDANCE AT 1 MHz:	120 Ω ± 10%

Features:

AWM STYLE 21080 75°C 300 V **(DEVICENET 656)**

ACC. TO DIN VDE 0472 PART 815+IEC60754-1

ROHS AND CE APPROVAL



Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no.*)
39370CVX02BA24	2 x 0,24 + 2 x 0,38	6,5	16,4	56	24/22
39370CVX02BA18	2 x 0,96 + 2 x 1,53	11,5	58,4	120	18/16
39380CVX02BA24	2 x 0,24 + 2 x 0,38	6,5	41,2	74	24/22
39380CVX02BA18	2 x 0,96 + 2 x 1,53	11,5	98,7	183	18/16

Other dimension and colours available on request.



DEVICENET™ 658 UL approval

DEVICENET™ 659 UL approval

ELETTROTEK KABEL® DEVICENET 658



Construction:

CONDUCTOR:	FLEXIBLE TINNED COPPER CONDUCTOR
INSULATION:	1ST PAIR: SPECIAL PE COMPOUND, ACC. TO DIN VDE 0819 PART 103 2ND PAIR: PVC TYPE T12 ACC. TO DIN VDE 0281 PART 1
COLOUR CORES:	SUPPLY PAIR: BLACK AND RED DATA PAIR: WHITE AND LIGHT BLUE
STRANDING:	CORES TWISTED IN PAIRS, PAIRS TWISTED TOGETHER
SCREEN:	PAIRS SCREENED INDIVIDUALLY WITH ALUMINIUM TAPE + TINNED COPPER DRAIN WIRE
WRAPPING:	NON-WOVEN TAPE (OPTIONAL)
SCREEN:	(DEVICENET 658): TINNED COPPER BRAID (DEVICENET 659): ALUMINIUM TAPE
OUTER SHEATH:	VIOLET (RAL 4001 OR 4005), PUR TYPE TPU, ACC. TO DIN VDE 0281 PART. 10

Technical data:

PEAK OPERATING VOLTAGE:	MAX. 350 V
UL VOLTAGE:	30 V
TEST VOLTAGE:	1,5 kV
TEMPERATURE RANGE	UL: UP TO + 60°C
FIXED LAYING:	-30 UP TO +70°C
FLEXIBLE INSTALLATION:	-5 UP TO +70°C
MIN. BENDING RADIUS:	
FIXED LAYING:	7,5 x D
FLEXIBLE INSTALLATION:	15 x D
CHARACTERISTIC IMPEDANCE AT 1 MHz:	120 Ω ± 10%

Features:

AWM STYLE 20417 60°C 30V

POSSIBLE VERSION WITH AWM STYLE 21576 80°C 1000V IDENTIFIED WITH "H" ON THE 6TH NUMBER OF THE PART. N

ROHS AND CE APPROVAL



Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no. *)
39390CVX02BA22	2 x 0,24 + 2 x 0,38	6,5	41,2	74	24/22
39390CVX02BA16	2 x 0,96 + 2 x 1,53	11,5	98,7	166	18/16
39400CVX02BA22	2 x 0,24 + 2 x 0,38	6,5	16,4	57	24/22
39400CVX02BA16	2 x 0,96 + 2 x 1,53	11,5	58,4	115	18/16

Other dimension and colours available on request.



PROFINET 654 fixed installation, type A

PROFINET 655 fixed installation, type A, UL approval

ELETTROTEK KABEL® PROFIBUS 654



Construction:

CONDUCTOR:	SOLID BARE COPPER CONDUCTOR
INSULATION:	PE COMPOUND
COLOUR CORES:	BLUE, YELLOW, WHITE, ORANGE
STRANDING:	
- PROFINET 654:	IN LAYERS
- PROFINET 655:	IN LAYERS + CENTRAL FILLER
WRAPPING:	PET FOIL
SCREEN:	
- PROFINET 654:	TINNED COPPER BRAID
- PROFINET 655:	ALUMINIUM TAPE + PET FOIL AND TINNED COPPER BRAID
OUTER SHEATH:	GREEN (SIMILAR RAL 6018) PVC COMPOUND

Technical data:

PEAK OPERATING VOLTAGE:	MAX. 350 V	
UL VOLTAGE:	300 V (PROFINET 655)	
TEST VOLTAGE:		
- PROFINET 654:	CORE/CORE 1,5 kV CORE/SCREEN 1,2 kV	
- PROFINET 655:	2 kV	
TEMPERATURE RANGE	PROFINET 654	PROFINET 655
FIXED LAYING:	-30 UP TO +70°C	-30°C UP TO +80°C
FLEXIBLE APPLICATION:	-5 UP TO +70°C	/
MIN. BENDING RADIUS:		
- PROFINET 654:	5 x D	
- PROFINET 655:	8 x D	
CHARACTERISTIC IMPEDANCE:	100Ω ± 5Ω, ACC. TO EN 50288-2-2 (CAT 5E ACC. TO EN 50173-1)	
OHMIC RESISTANCE AT 20°C MAX.Ω/km:		
- PROFINET 654:	58 ACC. TO VDE 0812	
- PROFINET 655:	56,4	

Resistance:



FLAME RETARDANT ACC. TO (PROFINET 655):
UL 1581 & 1060 (FT1)
UL 1061
IEC 60332-1



OIL RESISTANCE ACC. TO:
DIN VDE 0473 PART.811-2-1 IEC 60811-2-1



OZONE RESISTANCE ACC. TO (PROFINET 655):
EN 50396

Features:

AWM STYLE 10578-2571 80°C 300V (PROFINET 655)

ACC. TO STANDARD IEC 61156-5 AND EN 50228-2-1 (PROFINET 655)

ROHS AND CE APPROVAL





PROFINET 654 fixed installation, type A
PROFINET 655 fixed installation, type A, UL approval

ELETTROTEK KABEL® PROFIBUS 654



PROFINET 655 UL

FREQUENCY (MHZ)	ATTENUATION (DB/100 M)		NEXT (DB)		ACR-F (DB/100 M)		ACR (DB/100 M)		RETURN LOSS (DB/100 M)	
	MAX. - STD	TYPICAL	MIN. - STD	TYPICAL	MIN.	MIN.	MIN - STD	TYPICAL	MIN. STD	TYPICAL
1	2,1	1,6	65,3	80	64	81	63,2	78,4	-	29
4	4	3,2	56,3	73	52	72	52,3	69,8	23	30
10	6,3	5,1	50,3	65	44	63	44	59,9	25	31
16	8	6,5	47,2	63	39,9	57	39,2	56,5	25	31
20	9	7,4	45,8	60	38	54	36,8	52,6	25	31
31,25	11,4	9,5	42,9	56	34,1	48	31,5	46,5	23,6	27
62,5	16,5	14,3	38,4	51	28,1	39	21,9	36,7	21,5	26
100	21,3	22	35,3	48	24	32	14	29	20,1	25

Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no. *)
39210CEX022M03	2 x 2 x 0,34	5,3	28	43	22
39220CEX022A22	2 x 2 x 0,34	5,9	30,4	51	22

Other dimension and colours available on request.






PROFINET 662 flexible application, type B
PROFINET 663 flexible application, type B, UL approval,
PROFINET 663 PLTC flexible application, type B, UL & PLTC approval



Construction:

CONDUCTOR:	PROFINET 662): FLEXIBLE TINNED COPPER CONDUCTOR, FINE WIRES ACC. TO VDE 0812 (PROFINET 663): FLEXIBLE RED COPPER CONDUCTOR, FINE WIRES ACC. TO VDE 0812 (PROFINET 663 PLTC): FLEXIBLE TINNED COPPER CONDUCTOR, FINE WIRES ACC. TO VDE 0812
INSULATION:	PE TYPE L/MD ACC. TO DIN VDE 0819 PART 103
COLOUR CORES:	BLUE, YELLOW, WHITE, ORANGE
STRANDING:	(PROFINET 662 AND 663 PLTC): CORES TWISTED IN PAIRS, PAIRS TWISTED TOGETHER (PROFINET 663): IN LAYERS (STAR-QUAD CONSTRUCTION)
WRAPPING:	PETP FOIL
INNER SHEATH	PVC COMPOUND
SCREEN:	ALUMINIUM TAPE AND TINNED COPPER BRAID
OUTER SHEATH:	GREEN (SIMILAR RAL 6018), PVC COMPOUND

Resistance:

	SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO: (PROFINET 662) IEC 60332-1-2 EN 60332-1-2 (PROFINET 663) EC 60332-1-2 EN 60332-1-2, UL 1581 SECTION 1061 CSA FT1 (PROFINET 663 PLTC) IEC 60332-3A, UL 1685 CSA FT4
	OIL RESISTANCE ACC. TO: (PROFINET 662 AND 663 PLTC) DIN VDE 0473 PART.811-2-1 IEC 60811-2-1 (PROFINET 663) DIN VDE 0473 PART.811-2-1 IEC 60811-2-1 AND ICEA S-82-552,
	UV RESISTANCE ACC. TO (PROFINET 663, PROFINET 663 PLTC): UL1581 §1200 STD.

Technical data:

NOMINAL VOLTAGE:	(PROFINET 662 AND 663): 300 V (PROFINET 663 PLTC): 600 V		
TEST VOLTAGE:	(PROFINET 662 AND 663): 1,5 KV (PROFINET 663 PLTC): 2 KV		
TEMPERATURE RANGE	(PROFINET 662):	(PROFINET 663):	(PROFINET 663 PLTC):
FIXED LAYING:	-30 UP TO+70°C	-30 UP TO+80°C	-40 UP TO+80°C
FLEXIBLE INSTALLATION:	-5 UP TO+70°C	-5 UP TO+80°C	-5 UP TO+80°C
MIN. BENDING RADIUS:	(PROFINET 662):	(PROFINET 663):	(PROFINET 663 PLTC):
FIXED LAYING:	5 x D	5 x D	5 x D
FLEXIBLE INSTALLATION:	10 x D	10 x D	10 x D
CHARACTERISTIC IMPEDANCE:	100Ω ± 5Ω, ACC. TO EN 50288-2-2 CAT 5E ACC. TO EN 50173-1)		
OHMIC RESISTANCE AT 20°C MAX.Ω/km:	58, ACC. TO VDE 0812		

Features:

-  AWM STYLE 10578-2571 80°C 300V **(PROFINET 663)**
-  AWM STYLE 21694 80°C 600V **(PROFINET 663 PLTC)**
- ROHS AND CE APPROVAL





PROFINET 662 flexible application, type B

PROFINET 663 flexible application, type B, UL approval,

PROFINET 663 PLTC flexible application, type B, UL & PLTC approval

ELETTROTEK KABEL® PROFINET 663



PROFINET 663

ELETTROTEK KABEL® PROFINET 663 PLTC



PROFINET 663 PLTC

Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no. *)
39230CEX022M03	2 x 2 x 0,34	6,6	36,2	67	22
39240CEX022A22	2 x 2 x 0,34	6,6	36,2	70	22

Other dimension and colours available on request.

PROFINET 678 fixed installation, type A
SPECIAL PROFINET 678 UL flexible application, type B, UL approval



ELETTROTEKKABEL® SPECIAL PROFINET 678 UL



Construction:

CONDUCTOR:	(PROFINET 678): SOLID TINNED COPPER CONDUCTOR (PROFINET 678 UL): STRANDED TINNED COPPER CONDUCTOR, 7X0,16 mm - 26/7 AWG
INSULATION:	PE COMPOUND
COLOUR CORES:	WHITE/BLUE, WHITE/ORANGE, WHITE/GREEN, WHITE/BROWN
STRANDING:	CORES TWISTED IN PAIRS, PAIRS TWISTED TOGETHER
WRAPPING:	ALUMINIUM TAPE (PROFINET 678)
WRAPPING:	PETP FOIL (PROFINET 678 UL):
SCREEN:	TINNED COPPER BRAID (PROFINET 678)
SCREEN:	ALUMINIUM TAPE + PETP FOIL AND TINNED COPPER BRAID (PROFINET 678 UL)
OUTER SHEATH:	GREEN (SIMILAR RAL 6018), PVC COMPOUND

Technical data:

PEAK OPERATING VOLTAGE:	MAX. 350 V (PROFINET 678)
NOMINAL VOLTAGE:	125 V (PROFINET 678 UL)
TEST VOLTAGE:	(PROFINET 678) CORE/CORE 1,5 kV CORE/SCREEN 1,2 kV
TEST VOLTAGE:	(PROFINET 678 UL) CORE/CORE 700 V x 1 min CORE/SCREEN 700 V x 1 min
TEMPERATURE RANGE	(PROFINET 678):
FIXED LAYING:	-30 UP TO+70°C
FLEXIBLE INSTALLATION:	-5 UP TO+70°C
TEMPERATURE RANGE	(PROFINET 678 UL):
FIXED LAYING:	-30 UP TO+80°C
FLEXIBLE APPLICATION:	-5 UP TO+50°C
MIN. BENDING RADIUS:	
FIXED LAYING:	5 x D
SPORADIC MOVEMENT:	10 x D (PROFINET 678 UL)
OHMIC RESISTANCE AT 20°C MAX. Ω/km:	MAX. 150, ACC. TO VDE 0812 (PROFINET 678)
MAX. DC CONDUCTOR RESISTANCE:	140 Ω/km (PROFINET 678 UL)
CAPACITANCE AT 800 Hz:	48 pF/m (PROFINET 678 UL)
MAX. CAPACITANCE UNBALANCE:	1600 pF/km (PROFINET 678 UL)
PROPAGATION VELOCITY AT 100 MHz:	APPROX. 75% (PROFINET 678 UL)
CHARACTERISTIC IMPEDANCE:	(PROFINET 678) 100Ω (± 10%) ACC. TO EN 50288-2-2, CAT 5E ACC. TO EN 50173-1
CHARACTERISTIC IMPEDANCE:	(PROFINET 678 UL) 100Ω (± 15%), CAT 5E
MIN. INSULATION RESISTANCE:	5 GΩ x km (PROFINET 678 UL)
TRANSFER IMPEDANCE:	10 MΩ/m AT 1 MHz, 4 MΩ/m AT 10 MHz 4 MΩ/m AT 30 MHz, 2 MΩ/m AT 100 MHz (PROFINET 678 UL)
STANDARD REFERENCE:	IEC 61156-3, EN 50288-1, EN 50288-2-2 ISO IEC 11801

Resistance:



FLAME RETARDANT ACC. TO:
UL 1581 1061, CSA FT1, IEC 60332-1
STANDARD REQUIREMENTS **(PROFINET 678 UL)**



OIL RESISTANCE ACC. TO:
DIN VDE 0473 PART. 811-2-1 IEC 60811-2-1
(PROFINET 678)
EN 50363-4-1, IEC 60811-2-1, DIN VDE 0472-803
UL 13 (60°C), ACC. TO ICEA S-82-552 AND NEMA WC55
(PROFINET 678 UL)



SUNLIGHT RESISTANT ACC. TO:
UL 1581 1200 STANDARD REQUIREMENT
(PROFINET 678 UL)

Features:

(UL) AWM STYLE 1598 - 2571 30 V 80°C **(PROFINET 678 UL)**

ROHS AND CE APPROVAL



PROFINET 678 fixed installation, type A
SPECIAL PROFINET 678 UL flexible application, type B, UL approval



ELETTROTEK KABEL® SPECIAL PROFINET 678 UL



FREQUENCY (MHZ)	ATTENUATION (DB/100 M)		NEXT (DB)		PS NEXT (DB)		PS EL-FEXT (DB/100M)		PS ACR (DB/100 M)		RETURN LOSS (DB)	
	MAX. - STD	TYPICAL	MIN. - STD	TYPICAL	MIN.	MIN.	MIN - STD	TYPICAL	MIN.	TYPICAL	MIN. STD	TYPICAL
1	3,2	2,5	65,3	71	62,3	69	60,8	69	62,1	68,5	-	29
4	6	5,2	56,3	63	53,3	61	48,8	57	50,3	57,8	24,1	32
10	9,5	8,4	50,3	58	47,3	56	40,8	51	40,8	49,6	25	32
16	12,1	11	47,2	56	44,2	54	36,7	47	35,1	45	25	32
20	13,6	12,5	45,8	54	42,8	52	34,8	45	32,2	41,5	25	32
31,25	17,1	16	42,9	50	39,9	48	30,9	42	25,8	34	23,6	30
62,5	24,8	23,6	38,4	45	35,4	43	24,9	36	13,6	21,4	21,5	28
100	32	29,9	35,3	43	32,3	41	20,8	32	3,3	13,1	20,1	26
155,52		37,4		40		38	-	26	-	2,6	-	24
200		42,8		37		35	-	22	-	-	-	23

PROFINET 678 UL

Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no.*)
39290CEX042M01	4 x 2 x 0,14	6,2	33	49	26
39300BEX042A26	4 x 2 x 0,14	6,2	33	54	26

Other dimension and colours available on request.

SPECIAL PROFINET 681 continuously flexible, type C
SPECIAL PROFINET 682 continuously flexible, type C, UL approval









ELETTROTEK KABEL® SPECIAL PROFINET 681



Construction:

CONDUCTOR:	(PROFINET 681): FLEXIBLE TINNED COPPER CONDUCTORS EXTRA FINE WIRES (PROFINET 682): FLEXIBLE RED COPPER CONDUCTORS EXTRA FINE WIRES
INSULATION:	HALOGEN FREE COMPOUND
COLOUR CORES:	WHITE/BLUE, WHITE/ORANGE, WHITE/GREEN, WHITE/BROWN
STRANDING:	CORES TWISTED IN PAIRS
WRAPPING:	NON-WOVEN TAPE
SCREEN:	ALUMINIUM TAPE AND TINNED COPPER BRAID
WRAPPING:	NON-WOVEN TAPE
OUTER SHEATH:	GREEN (SIMILAR RAL 6018) PUR COMPOUND

Resistance:

	SELF-EXTINGUISHING AND FLAME RETARDANT ACC. TO: IEC 60332-1 (SPECIAL PROFINET 682)
	HALOGEN-FREE ACC. TO: DIN VDE 0472, PART 815, EN 50267-2-2, IEC 60754-1 (SPECIAL PROFINET 681 & 682)
	CORROSIVENESS OF CONFLAGRATION GASES ACC. TO: EN 50267-2-2, IEC 60754-2 (SPECIAL PROFINET 682)
	OIL RESISTANCE ACC. TO: DIN VDE 0282 PART 10 + HD 22.10 (SPECIAL PROFINET 681) IEC 60811-2-1, ICEA S-82-552 AND ASTM-OIL 1 (SPECIAL PROFINET 682)
	UV RESISTANT / SUNLIGHT RESISTANT ACC. TO: UL1581§1200 (SPECIAL PROFINET 682)
	MUD RESISTANCE ACC. TO: NEK 606 (SPECIAL PROFINET 682)

Technical data:

PEAK OPERATING VOLTAGE:	MAX. 350 V
TEST VOLTAGE:	CORE/CORE 1,5 KV CORE/SCREEN 1,2 KV
TEMPERATURE RANGE	
FIXED LAYING:	- 40 UP TO +90°C
FLEXIBLE APPLICATION:	- 30 UP TO +70°C
MIN. BENDING RADIUS:	
FIXED LAYING:	5 x D
FLEXIBLE INSTALLATION:	10 x D
CONTINUOUSLY FLEXIBLE:	12 x D
MAX SPEED (MAIN APPLICATION):	250 m/min
CHARACTERISTIC IMPEDANCE:	100Ω ± 5Ω, ACC. TO EN 50288-2-2 (CAT 5E ACC. TO EN 50173-1)

Features:

 AWM 10493-20233 300V/80°C CE
(SPECIAL PROFINET 682)

ACC. TO STANDARDS:
EN 50288-1,
EN 50288-2-2,
EN 50173,
IEC 61156-3,
ISO/IEC 11801
(SPECIAL PROFINET 682)

FOR SPEED SEE PAGES FROM 1 AND 2 OF CATALOGUE

ROHS AND CE APPROVAL



SPECIAL PROFINET 681 continuously flexible, type C
SPECIAL PROFINET 682 continuously flexible, type C, UL approval



ELETTROTEK KABEL® SPECIAL PROFINET 681



Part no.	No. of cores x cross section n x mm ²	Outer-Ø ca. mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	AWG no. *)
39320CEX042M01	4 x 2 x 0,14	7,2	35,5	58	26
39330CEX022A22	2 x 2 x 0,34	6,8	25	-	22
39330CEX042A26	4 x 2 x 0,14	7,3	35,5	60	26

Other dimension and colours available on request.

SPECIAL PROFINET 678 UL

S/FTP CAT. 6A



ELETTROTEK KABEL® SPECIAL PROFINET 678 UL S/FTP Cat. 6A



Construction:

CONDUCTOR:	STRANDED BARE COPPER CONDUCTOR
INSULATION:	PO COMPOUND
COLOUR CORES:	WHITE/BLUE, WHITE/ORANGE, WHITE/GREEN, WHITE/BROWN
STRANDING:	CORES TWISTED IN PAIRS, PAIRS TWISTED TOGETHER
INDIVIDUAL SCREEN:	ALUMINIUM/POLYESTER TAPE
OVERALL SCREEN:	TINNED COPPER BRAID (COVERAGE 85%)
OUTER SHEATH:	GREEN (SIMILAR RAL 6018), PVC COMPOUND

Resistance:



FLAME RETARDANT ACC. TO:

CEI 20-35
EN 50265
IEC 60332-1
UL VW-1
CSA FT1



HYDROCARBONS AND OIL RESISTANCE ACC. TO:

UL 1581
DIN VDE 0472 PART 803
HD 22.10

Technical data:

OPERATING VOLTAGE:	MAX. 125 V
TEST VOLTAGE:	
- DIRECT CURRENT	1000 V X 1 min
- ALTERNATE CURRENT	700 V x 1 min
TEMPERATURE RANGE	-20°C UP TO +80°C
MIN. BENDING RADIUS:	
- FIXED LAYING:	5 x D
MAX. CONDUCTOR RESISTANCE AT 20°C:	MAX. 69,5 Ω/km
CAPACITANCE AT 800 TO 1000 Hz:	43 pF/m
PROPAGATION VELOCITY:	APPROX. 78%
CHARACTERISTIC IMPEDANCE:	100 ± 10 Ω
MIN. INSULATION RESISTANCE:	MIN. 5 GΩ x km
TRANSFER IMPEDANCE:	10 MΩ/m AT 1 MHz, 10 MΩ/m AT 10 MHz 15 MΩ/m AT 30 MHz

Features:

cURus AWM STYLE 2919 80°C 30 V

ROHS AND CE APPROVAL



SPECIAL PROFINET 678 UL

S/FTP CAT. 6A



ELETTROTEK KABEL® SPECIAL PROFINET 678 UL S/FTP Cat. 6A



FREQUENCY (MHZ)	ATTENUATION (DB/100 M)		NEXT (DB)		PS NEXT (DB)		EL-FEXT (DB/100M)		PS EL-FEXT (DB/100M)		RETURN LOSS (DB)	
	REQUIRED	TYPICAL	REQUIRED	TYPICAL	REQUIRED	TYPICAL	REQUIRED	TYPICAL	REQUIRED	TYPICAL	REQUIRED	TYPICAL
1	2,9	2,2	80	100	77	95	80	96	77	98	-	-
4	5,5	3,8	80	100	77	95	80	93	77	90	23,1	35
10	8,5	5,9	80	95	77	90	74	90	71	98	25	38
16	10,8	7,4	80	90	77	86	69,9	100	66,9	105	25	32
20	12,1	8,4	80	90	77	80	68	100	65	90	25	32
31,25	15,2	10,5	80	90	77	80	64,1	100	61,1	90	23,6	31
62,5	21,7	15,3	75,1	85	72,5	80	58,1	100	55,1	90	21,5	27
100	27,8	18,1	72,4	82	69,4	75	54	100	51	90	20,1	34
155,52	35	23,2	69,6	80	66,6	70	50,2	100	47,2	90	18,8	28
200	40,1	26,6	67,9	77	64,9	68	48	100	45	90	17,3	25
300	50	33,3	65,3	71	62,3	66	44,5	100	41,5	90	17,3	23
600	73,3	50,1	60,8	67	57,8	62	38,4	100	35,4	90	17,3	21

Part no.	No. of cores x cross section n x AWG	Outer-Ø ca. mm ± 10%	Cable weight approx. kg/km
39620AEX042A23	4 x 2 x AWG23	8,6	91

Other dimension and colours available on request.