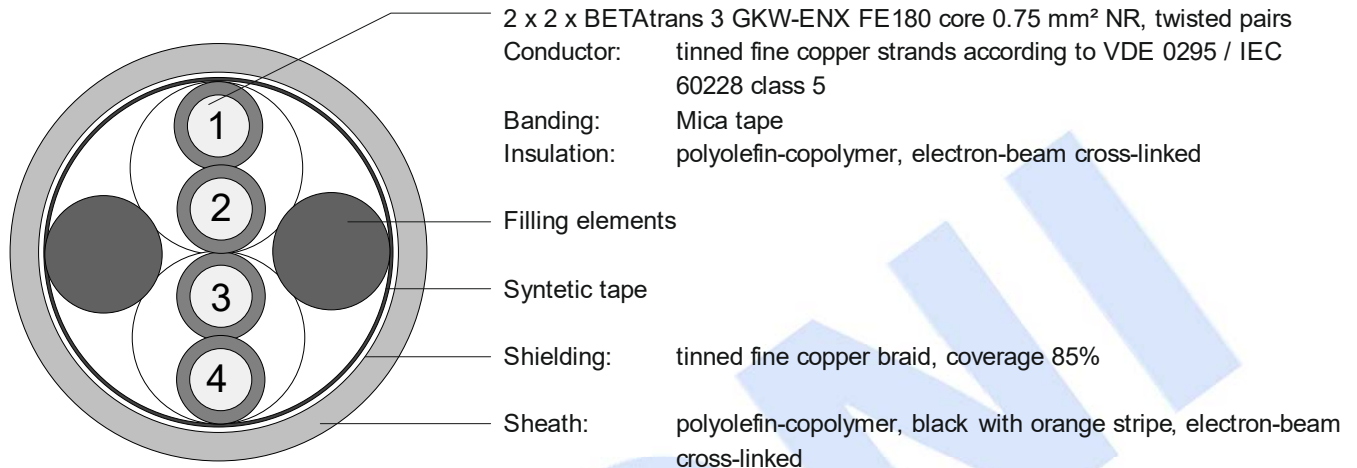


BETAtrans 3 GKW-ENX FE180 C-flex, black with orange stripe

2 x 2 x 0.75 mm² NR

Item no.: 316819

Construction



Dimensions (approx.)

Ø Tinned fine copper strand "SRC"	1.10 mm
Ø BETAtrans 3 GKW FE180 core	2.90 mm
Ø over core stranding	9.30 mm
Ø over shielding (copper braid)	9.80 mm
Ø cable	11.40 mm

Electrical specifications at 90 °C conductor temp.

Nominal voltage U₀/U	Nominal current main core ¹	Impedance Ω/km	DC-Resistance Ω/km	AC-Resistance Ω/km	Reactance Ω/km	Capacitance		Inductance mH/km
						core/core	core/shielding	
						nF/km		
0.6/1 kV	11 A	34.05	26.7	34.05	0.12	< 90	< 130	0.382

¹ S1 (perforated cable tray), Ambient temp. 45 °C

Technical data

Testing voltage	core / core	3500 V
	core / shielding	3500 V
Max. conductor temperature	fixed installation	+120 °C
	short circuit	+280 °C / 5 sec.
Min. ambient temperature	fixed installation	-40 °C
Min. bending radius	cable-Ø < 10 mm	> 3 x Ø
	cable-Ø > 10 mm	> 4 x Ø
Cable weight		~ 181 kg/km

Specifications subject to change without notice

BETAtrans 3 GKW-ENX FE180 C-flex, black with orange stripe 2 x 2 x 0.75 mm² NR

Item no.: 316819

Fire performance for rolling stock	EN 50264-1 / EN 45545-2	hazard level HL1 - HL3
Vertical flame propagation: for a single insulated wire or cable	EN 60332-1-2	carbonisation > 50 and ≤ 540 mm
Vertical flame spread: of bunched wires or cables ≥ 12 mm	EN 60332-3-24	carbonisation < 2.5 m
of bunched wires or cables > 6 < 12 mm	EN 60332-3-25	carbonisation < 2.5 m
of bunched wires or cables ≤ 6 mm	EN 50305	carbonisation < 1.5 m
Smoke density	EN 61034-2	transmittance > 70 %
Toxicity of smoke	EN 50305	ITC ≤ 3
Absence of halogens	EN 50267-2-1 EN 60684-2	HCl and HBr < 0.5 % HF < 0.1 %
Corrosivity of gases	EN 50267-2-2 EN 50267-2-2	pH > 4.3 conductivity < 10 μS/mm
Circuit integrity (Uo)	IEC 60331-21 EN 50200	180 min. 120 min.
Material properties	EN 50264-3-1	hazard level M
Resistance to ozone	EN 60811-403	72h/40 °C, method B volume concentration 200x10 ⁻⁶
Resistance to cold	EN 60811-504	-40°C
Resistance to oil	EN 60811-404	72h/100 °C, IRM 902
Resistance to fuel	EN 60811-404	168h/70 °C, IRM 903
Resistance to acid	EN 60811-404	168/23 °C, n-Oxalic acid
Resistance to alkaline	EN 60811-404	168/23 °C, n-NaOH
Low fire load	DIN 51900	
Limiting oxygen index (LOI)	ISO 4589-2 ASTM D 2863	> 30 % > 30 %

Specifications subject to change without notice