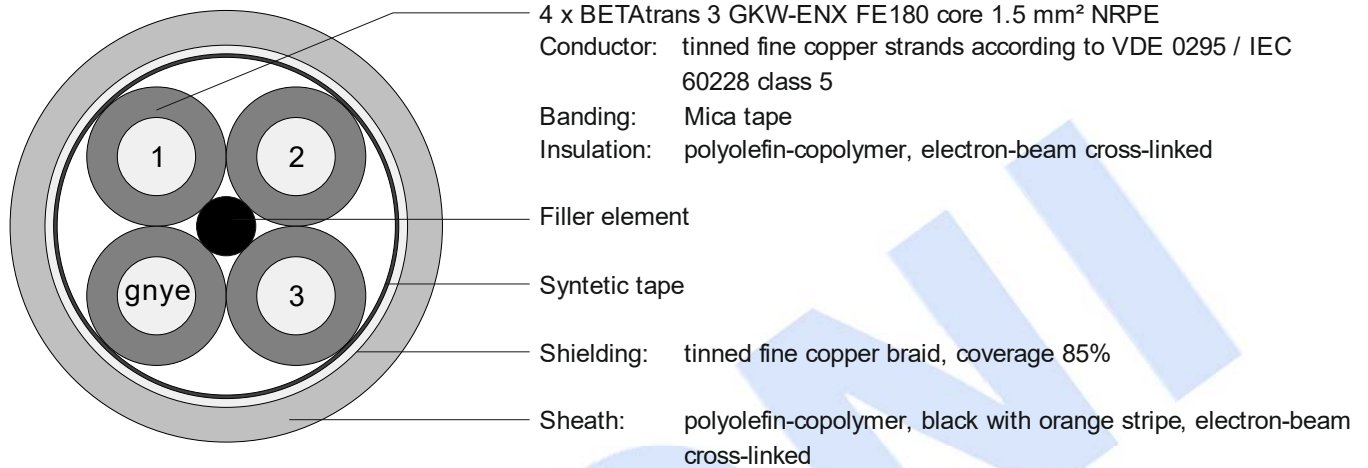


# BETAtrans 3 GKW-ENX FE180 C-flex, black with orange stripe 4G2.5 mm<sup>2</sup> NRPE

Item no.: 316817

## Construction



## Dimensions (approx.)

Ø Tinned fine copper strand "SRC"	1.95 mm
Ø BETAtrans 3 GKW-ENX FE180 core	3.95 mm
Ø over core stranding	9.60 mm
Ø over shielding (copper braid)	10.10 mm
Ø cable	12.00 mm

## Electrical specifications at 90 °C conductor temp.

Nominal voltage $U_0/U$	Nominal current main core <sup>1</sup> 23 A	Impedance $\Omega/km$	DC-Resistance $\Omega/km$	AC-Resistance $\Omega/km$	Reactance $\Omega/km$	Capacitance		Inductance mH/km
						core/core	core/shielding	
						nF/km		
0.6/1 kV	23 A	10.47	8.21	10.47	0.111	< 120	< 135	0.353

<sup>1</sup> 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		~ 225 kg/km

Specifications subject to change without notice

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<b>Fire performance for rolling stock</b>	<b>EN 50264-1 / EN 45545-2</b>	<b>hazard level HL1 - HL3</b>
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.
<b>Material properties</b>	<b>EN 50264-3-1</b>	<b>hazard level M</b>
Resistance to ozone	EN 60811-403	72h/40 °C, method B volume concentration 200x10 <sup>-6</sup>
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