



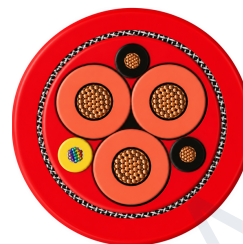
TEBAOFLEX CABLE

DATA SHEET

Crane & Reeling Cable

MV REELING CABLE WITH OPTICAL FIBRES

(N)TSCGEW0EU | 3.6/6, 6/10, 8.7/15 and 12/20 kV



APPLICATION

Flexible medium-voltage cable for high-speed, high-pull reeling with torsion resistance. Suitable for mono-spiral drums, spreaders and tender systems. Optical-fibre options include 9/125, 50/125 and 62.5/125.

ELECTRICAL DATA

Parameter	Value
Rated voltage U_0/U	3.6/6 6/10 8.7/15 12/20 kV
Max. operating voltage	7.2 12 18 24 kV (three-phase systems)
Test voltage	11 17 24 29 kV
Design reference	DIN VDE 0250-813 (with reference to)

CABLE DESIGN

Parameter	Value
Conductor	Tinned copper, flexible class 5
Insulation	HEPR with inner and outer semiconducting rubber layers
Protective conductors	Split in the outer interstices
Inner sheath	GM1b rubber
Torsion protection	Polyester braid
Outer sheath	CR 5GM5 rubber; red

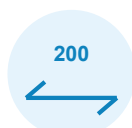
OPERATING CONDITIONS

Parameter	Value
Maximum conductor temperature	90 C
Outer cable temperature, fixed	-40 C to +80 C
Outer cable temperature, moving	-30 C to +80 C
Minimum bend radius, fixed	6 x outer diameter
Minimum bend radius, moving	12 x outer diameter

REELING & HANDLING



ONE-WAY
300 m/min



TWO-WAY
200 m/min



SPREADER
200 m/min



RANDOM / TENDER
60 m/min



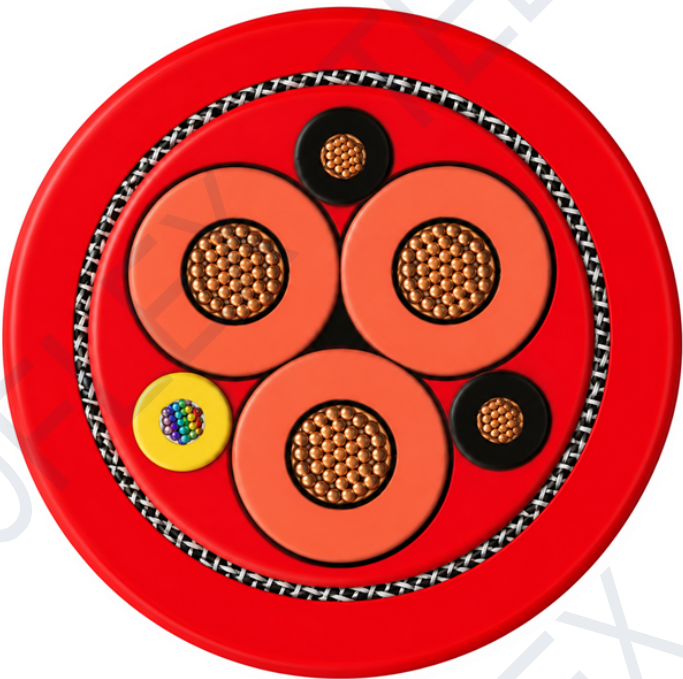
BEND RADIUS
6D / 12D

TECHNICAL DATA | 3.6/6 & 6/10 kV

3.6/6 kV				
Construction	RI ohm/km	OD approx mm	Fzp / Fzd N / N	Cu* / G source / kg
3x35 + 2x25/2 + 24 FO (9/125)	0.565	47.2	3000 / 4125	1248 / 3050
3x35 + 2x25/2 + 24 FO (50/125)	0.565	47.2	3000 / 4125	960 / 2560
6/10 kV				
Construction	RI ohm/km	OD approx mm	Fzp / Fzd N / N	Cu* / G source / kg
3x25 + 2x25/2 + 24 FO (9/125)	0.795	45.5	3000 / 4125	960 / 2560
3x25 + 2x25/2 + 24 FO (62.5/125)	0.795	42.5	3000 / 4125	960 / 2400
3x25 + 2x25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.795	45.5	3000 / 4125	960 / 2560
3x35 + 2x25/2 + 12 FO (9/125)	0.565	47.2	3000 / 4125	1248 / 3050
3x35 + 2x25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.565	47.2	3000 / 4125	1248 / 3050
3x50 + 2x25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.393	50.2	3600 / 5250	1680 / 3520
3x70 + 2x35/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.277	54.2	5000 / 7500	2352 / 4700
3x35 + 3x35/3 + (18x2.5)C + 24 FO (9/125)	0.565	56.5	3000 / 4125	2030 / 4400
3x95 + 2x50/2 + 24 FO (50/125)	0.21	58.5	6500 / 8900	3216 / 5880
3x95 + 2x50/2 + 24 FO (9/125)	0.21	59	6500 / 8900	3216 / 5840
3x95 + 2x50/2 + 24 FO (62.5/125)	0.21	58.5	6500 / 8900	3216 / 5880

Fzp/Fzd: permanent/dynamic tensile force. OD values are approximate.

CABLE CROSS-SECTION



Three screened power cores

Split protective conductors

Optical-fibre unit

Polyester torsion braid

Red CR outer sheath

Representative section; fibre arrangements vary by configuration.

TECHNICAL DATA | 8.7/15 & 12/20 kV

8.7/15 kV				
Construction	RI ohm/km	OD approx mm	Fzp / Fzd N / N	Cu* / G source / kg
3x25 + 2x25/2 + 24 FO (9/125)	0.795	47.5	3000 / 4125	960 / 2840
3x25 + 2x25/2 + 24 FO (62.5/125)	0.795	47.5	3000 / 4125	960 / 2840
3x35 + 2x25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.565	47	3000 / 4125	960 / 2840
3x35 + 2x25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.565	46	3000 / 4125	1248 / 3300
3x35 + 2x25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.565	50.1	3000 / 4125	1248 / 3250
3x50 + 2x25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.393	54	3600 / 5250	1680 / 3890
3x70 + 2x25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.277	58	5000 / 7500	2352 / 5100

12/20 kV				
Construction	RI ohm/km	OD approx mm	Fzp / Fzd N / N	Cu* / G source / kg
3x25 + 2x25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.795	51	3000 / 4125	960 / 3180
3x25 + 2x25/2 + 24 FO (9/125)	0.795	49.6	3000 / 4125	960 / 3180
3x25 + 2x25/2 + 24 FO (62.5/125)	0.795	51	3000 / 4125	960 / 3180
3x35 + 2x25/2 + 24 FO (9/125)	0.565	54	3000 / 4125	1248 / 3800
3x35 + 2x25/2 + 12 FO (62.5/125)	0.565	54.5	3000 / 4125	1248 / 3800
3x35 + 2x25/2 + 24 FO (62.5/125)	0.565	54.5	3000 / 4125	1248 / 3800
3x35 + 2x25/2 + 24 FO (62.5/125)	0.565	71	3000 / 4125	1248 / 6250
3x70 + 2x35/2 + 24 FO (62.5/125)	0.277	63	5000 / 7500	3072 / 5800

DATA KEY

RI: conductor resistance. OD: approximate outer diameter.
Fzp/Fzd: permanent/dynamic tensile force; values shown in this order.
Cu*: copper weight as listed in source (unit unstated); G: net kg per 1000 m.
FO: optical fibres; fibre count and type are specified in each construction.

CERTIFICATIONS

