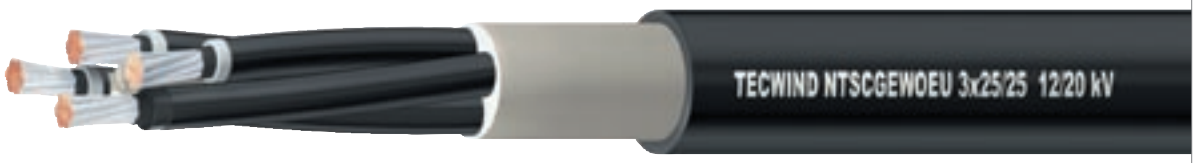
PRYSMIAN
CABLES & SYSTEMS

TECWIND NTSCGEWOEU

ENERGY

Technical Data

	Type	TECWIND
	Type designation	NTSCGEWOEU
	Approvals	DIN VDE 0250, Part 813
	Application	The cables are intented for use in wind turbines with high mechanical effort in a temperature range from -40°C to +90°C. The cables can be installed free moveable, free hanging or fixed. For free hanging operation the cables are twistable. The cables are used for economical power transmission of large energy rates with medium voltage. In other respects DIN VDE 0250 applies.
Electrical parameters	Rated voltage	Uo/U = 3.6/6.0 kV to 20/35 kV
	Maximum permissible operating voltage in AC systems	Uo/U = 4.2/7.2 kV to 24.3/42 kV
	Maximum permissible operating voltage in DC systems	Uo/U = 5.4/10.8 kV to 31.5/63 kV
	AC test voltage	17 kV to 50 kV over 5 min., according to DIN VDE 0250, Part 813
	Current-carrying capacity	The values are valid for permanent operation with DC or AC with 50 up to 60 Hz at 30°C ambient temperature. (In other respects DIN VDE 0295, Part 4 applies)
Thermal parameters	Maximum permissible operating temperature of the conductor	permanent 90°C
	Ambient temperature - when in motion: - when stationary:	 - 40°C - 40°C
	Short-circuit temperature of the conductor	200°C
Mechanical parameters	Tensile load	Up to 20 N/mm² copper cross-section
	Torsional stresses	+/- 100 °/m
	Minimum bending radius	See \"Selection data\"
Chemical parameters	Resistance to mineral oil	acc. to DIN EN 60811-2-1 (VDE 0473, Part 811-2-1)
	Resistance to Ozone	acc. to DIN VDE 0282 Part 2, HD 22.2 Test type B
	UV-resistance	acc. to ISO 4982-2 Method A
	Behaviour in case of fire	acc. to DIN EN 50265-2-1 (corresponds to IEC 60332-1)



Design features

Type	TECWIND
Conductor	Electrolytic copper, tinned, finely stranded, Class 5 according to DIN VDE 0295 / IEC 60228
Insulation	Heat resistant insulation based on EPR
Electrical field control	Inner and outer layer of semiconductive rubber
Core identification	Natural colouring with black semiconductive rubber
Sheath	Heat- and cold-resistant special rubber compound based on CM or CR (CM = Chlorinated synthetic rubber) (CR = Chloroprene rubber), resistant to Ozone, UV and mineral oil. Colour black
Marking	PRYSMIAN TECWIND NTSCGEWOEU (number of cores) x (cross-section) (voltage) + VDE

Selection and ordering data

Number of cores and nominal cross-section [mm²]	Order No.	Conductor diameter (guidance value) [mm]	Overall diameter of cable (Min. value) [mm]	Overall diameter of cable (Max. value) [mm]	Bending radius (fixed installation) [mm]	Bending radius (free moving) [mm]	Net weight [kg/km]	Permissible tensile force [N]	Max. suspension length (safety factor 1) [m]	Current-carrying capacity at 30°C, for 1 cable [A]	Maximum permissible short-circuit current (1s) [kA]
12/20 kV TECWIND NTSCGEWOEU											
3x25/25	5DK5 9010	6,4	59,2	63,2	379	632	4780	2000	42	146	3,58
3x35/35	5DK5 9020	7,6	63,9	67,9	407	679	5700	2800	49	181	5,01
3x50/50	5DK5 9030	9,1	67,5	71,5	429	715	6630	4000	60	227	7,15
3x70/70	5DK5 9040	10,8	71,5	75,5	453	755	7840	5600	71	279	10,01
18/30 kV TECWIND NTSCGEWOEU											
3x25/25	5DK6 9010	6,4	77,1	81,1	487	811	7520	2000	27	146	3,58
3x35/35	5DK6 9020	7,6	78,5	82,5	495	825	8050	2800	35	181	5,01
3x50/50	5DK6 9030	9,1	81,1	85,1	511	851	8920	4000	45	227	7,15
3x70/70	5DK6 9040	10,8	86,5	91,5	549	915	10600	5600	53	279	10,01
20/35 kV TECWIND NTSCGEWOEU											
3x25/25	5DK7 9010	6,4	83,7	88,7	532	887	8820	2000	23	146	3,58
3x35/35	5DK7 9020	7,6	88,3	93,3	560	933	10000	2800	28	181	5,01
3x50/50	5DK7 9030	9,1	90,5	95,5	573	955	10830	4000	37	227	7,15
3x70/70	5DK7 9040	10,8	93,6	98,6	592	986	12050	5600	46	279	10,01