



TECWIND H07BN4-F



Technical Data

	Type	TECWIND
	Type designation	H07BN4-F
	Approvals	DIN VDE 0282-12 (HD 22.12)
	Application	<p>The TECWIND cables are intended 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.</p> <p>These cables can be used outdoors, indoors, in hazard areas, in locations exposed to fire hazards, in industrial and agricultural plants.</p> <p>The cables are allowed for use to 1.000 V AC or 750 V DC to earth at protected installation such as tubes, equipment`s or electrical operation points.</p> <p>In other respects DIN VDE 0298-300 (HD 516) applies.</p>
Electrical parameters	Rated voltage	U ₀ /U = 450/750V
	Maximum permissible operating voltage in AC systems	U ₀ /U = 476/825 V
	Maximum permissible operating voltage in DC systems	U ₀ /U = 619/1238 V
	AC test voltage	2.5 kV (15 min.)
	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 0298, Part 4 applies)
Thermal Parameters	Maximum permissible operating temperature of the conductor	permanent 90°C
	Minimum permissible temperature during operation, laying, transportation and storage	
	- when in motion: - when stationary:	- 40°C - 40°C
	Maximum permissible short-circuit temperature at conductor	250°C (max. 5 s)
Mechanical parameters	Tensile load	Max. 15N/mm ² copper cross-section
	Torsional stress	+/- 150°/m
	Minimum bending radii	See Selection data
Chemical parameters	Resistance to mineral oil	acc. to DIN EN 60811-2-1
	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, UL 1881 Xeno Test
	Behaviour in case of fire	Flame propagation, single cable according to DIN EN 50265-2-1



Design features

Type	TECWIND
Conductor	Electrolytic copper, finely stranded, Class 5 according to DIN VDE 0295 / IEC 60228
Insulation	Heat resistant, crosslinked insulation based on EPR
Sheath	Heat- and cold-resistant, special rubber compound based on CM (Chlorinated Rubber). Resistant against ozone, UV and mineral oil
Marking	PRYSMIAN TECWIND H07BN4-F (number of cores) x (cross-section) + -VDE- -HAR-

Selection and ordering data

Number of cores and nominal cross-section	Order No.	Conductor diameter (guidance value)	Overall diameter of cable (Min. value)	Overall diameter of cable (Max. value)	Bending radius (fixed installation)	Bending radius (free movement and entry)	Net weight	Permissible tensile load	Max. suspension length (safety factor 1)	Current-carrying capacity at 30°C, for 1 cable	Maximum permissible short-circuit current (1s)
[mm ²]		[mm]	[mm]	[mm]	[mm]	[mm]	[kg/km]	[N]	[m]	[A]	[kA]
TECWIND H07BN4-F single-core design, with black core insulation											
1 X 25	5DH7 102	6,4	12,9	14,1	56	71	371	375	101	178	3,58
1 X 35	5DH7 103	7,5	14,3	15,7	63	79	482	525	109	220	5,01
1 X 50	5DH7 104	9,0	16,5	18,0	72	90	667	750	112	275	7,15
1 X 70	5DH7 105	10,6	18,6	20,0	80	100	888	1050	118	340	10,01
1 X 95	5DH7 106	12,9	21,6	23,1	92	116	1175	1425	121	409	13,59
1 X 120	5DH7 107	14,6	24,0	25,5	102	128	1490	1800	121	479	17,16
1 X 150	5DH7 108	16,6	26,2	28,5	114	143	1803	2250	125	549	21,45
1 X 185	5DH7 109	18,0	28,4	30,7	123	154	2220	2775	125	627	26,46
1 X 240	5DH7 110	20,7	32,1	34,4	138	172	2835	3600	127	744	34,32
1 X 300	5DH7 111	23,4	34,7	36,9	148	185	3435	4500	131	861	42,90
1 X 400	5DH7 112	27,3	39,0	42,0	168	210	4490	6000	134	993	57,20
TECWIND H07BN4-F three-core design, without protective-earth conductor											
3 X 25	5DH7 117	6,8	27,5	31,0	124	155	1500	1125	75	131	3,58
3 X 35	5DH7 118	8,1	31,0	34,5	138	173	1960	1575	80	162	5,01
3 X 50	5DH7 119	9,6	36,0	39,5	158	198	2640	2250	85	202	7,15
3 X 70	5DH7 120	11,2	40,5	43,5	174	218	3520	3150	89	250	10,01
3 X 95	5DH7 121	13,2	46,5	49,5	198	248	4590	4275	93	301	13,59
3 X 120	5DH7 122	14,9	50,5	55,0	220	275	5490	5400	98	352	17,16
TECWIND H07BN4-F four-core design, with protective-earth conductor											
4 G 25	5DH7 132	6,8	30,5	34,0	136	170	1870	1500	80	131	3,58
4 G 35	5DH7 133	8,1	34,5	38,0	152	190	2320	2100	91	162	5,01
4 G 50	5DH7 134	9,6	39,0	42,0	168	210	3190	3000	94	202	7,15
4 G 70	5DH7 135	11,2	43,5	47,0	188	235	4240	4200	99	250	10,01
4 G 95	5DH7 136	13,2	51,5	56,0	224	280	5716	5700	100	301	13,59
4 G 120	5DH7 137	14,9	56,0	60,5	242	303	6950	7200	104	352	17,16