

OZOFLEX (PLUS)

Flexible Cables for Submersion in Polluted Liquids

SIEMENS
Flexible cables



APPLICATION

- ~ Sewage Treatment Plants
- ~ Waste water pumps - effluent aerators
- ~ Abattoirs (high temp chemical cleaning)
- ~ Dairy industry
- ~ Mining - de-watering
- ~ Chemical plants & steelworks
- ~ Hygienic cleaning in breweries, food processing plants etc.
- ~ Water depth approx. 10m in waste water, up to 500m in all other types

DESIGN

OZOFLEX (PLUS) cables consist of finely stranded copper conductors laid up to provide a flexible design. R-EP-90 elastomer insulation provides improved current capacities. Cables above 16mm² and all control cables include an additional elastomer inner sheath and all cables up to 6mm²

have tinned conductors. The specially compounded heavy duty CSP Elastomer sheath (Hypalon) is oil resistant and flame retardant and resists the effects of water absorption. The construction is in accordance with the Australian

CURRENT CARRYING CAPACITY

Current ratings are based on continuous operation at an ambient temperature of 40°C. At other temperatures these values must be converted using the following table

°C	15	20	25	30	35	40	45	50	55	60	65	70	75	80
Factor	1.26	1.20	1.15	1.1	1.05	1	0.94	0.88	0.81	0.73	0.65	0.57	0.47	0.34

CORE COLOUR IDENTIFICATION

Single Core black
 3 Core blue, brown, green/yellow
 4 Core blue, brown, black, green/yellow
 5 Core blue, brown, black, green/yellow, black
 Multi core black insulation sequentially numbered including a green/yellow earth core.

OPERATING TEMPERATURE

- Minimum permissible ambient temperature -40°C
- Maximum permissible short circuit temperature 250°C
- Minimum ambient temperature for optimum fully flexible operation -25°C

VOLTAGE RATING

- Rated Voltage: U_o/U = 0.6/1kV
- Maximum operating voltages in:
 - 3 phase AC operation U_o/U = 0.7/1.15kV
 - DC operation U_o/U = 0.9/1.73kV
- AC test voltage = 2.5kV
- * The cable is designated 450/750V with E11 insulation compound in accordance with VDE/IEC and meets or exceeds the Australian Standard AS 3116 for the voltage rating of 0.6/1kV, R-EP-90.

MINIMUM BENDING RADII

- The following minimum bending radii should be observed to ensure operating reliability.
- For fixed installation 4 x cable diameter
 - When freely flexing 5 x cable diameter

TENSILE STRENGTH

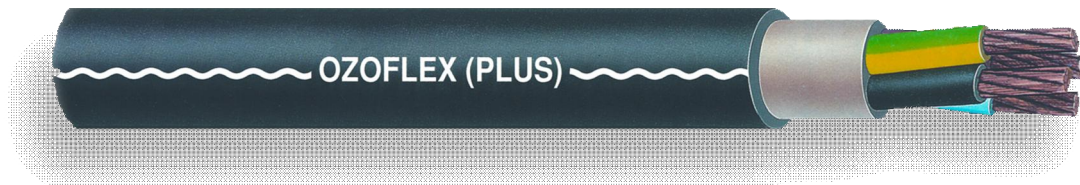
The maximum allowable tensile stress is 15N/mm². This ensures no conductor damage will occur in operation.

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	Number of Cores x Conductor Size	Part No.	Approx. No of Strands x Max. Strand Diameter	Diameter of Bare Conductor	Cable Overall Diameter		Cable Weight	Current Carrying Capacity
					Min mm	Max mm		
	mm ²		mm	mm	Min mm	Max mm	kg/km	A
OZOFLEX (PLUS) Black insulation and sheath	1 x 10	5DH1 005	80 x 0.41	5	9.8	12.5	230	65
	1 x 16	5DH1 006	126 x 0.41	6.3	11	14.5	320	86
	1 x 25	5DH1 007	196 x 0.41	8	12.5	16.5	450	115
	1 x 35	5DH1 008	276 x 0.41	9.7	14	18.5	605	145
	1 x 50	5DH1 010	396 x 0.41	11	16.5	21	825	175
	1 x 70	5DH1 011	360 x 0.51	13	18.5	23.5	1090	225
	1 x 95	5DH1 012	475 x 0.51	15.2	21	26	1405	280
OZOFLEX (PLUS) including a green/yellow earth	3G1	5DH1 014	29 x 0.21	1.5	8.6	9.6	122	14
	3G1.5	5DH1 015	27 x 0.26	1.8	9.6	10.6	154	19
	3G2.5	5DH1 016	45 x 0.26	2.6	11.5	12.8	229	26
	3G4	5DH1 017	50 x 0.31	3.2	13.2	14.8	319	35
	3G6	5DH1 018	75 x 0.31	3.9	14.5	16.9	420	45
	3G10	5DH1 020	78 x 0.31	5.1	20.4	22.4	780	62
	7G1.5	5DH1 241	30 x 0.26	1.5	14	17.5	355	19
OZOFLEX (PLUS) including a green/yellow earth	4G1.5	5DH1 021	27 x 0.26	1.8	10.5	12.0	192	19
	4G2.5	5DH1 022	45 x 0.26	2.6	12.5	14.0	279	26
	4G4	5DH1 023	50 x 0.31	3.2	14.5	16.1	388	35
	4G6	5DH1 024	75 x 0.31	3.9	16.5	18.6	530	45
	4G10	5DH1 025	78 x 0.41	5.1	22.2	24.2	940	62
	4G16	5DH1 026	124 x 0.41	6.3	26.1	29.1	1310	83
	4G25	5DH1 027	192 x 0.41	7.8	29.8	33.8	1890	110
	4G35	5DH1 028	271 x 0.41	9.2	34.6	37.6	2460	135
	4G50	5DH1 030	388 x 0.41	11	40.3	43.3	3390	170
	4G70	5DH1 031	511 x 0.41	11.3	43.0	48.5	4450	215
	4G95	5DH1 032	733 x 0.41	13.2	49.0	55.0	5830	265
	4G120	5DH1 033	938 x 0.41	15	53.0	60.0	7140	305
OZOFLEX (PLUS) with pilots	4G1.5 + 2 x 1.5	5DH1 069	28 x 0.26	1.5	14.0	16.0	310	19
	4G2.5 + 2 x 1.5	5DH1 070	45 x 0.26	1.9	16.0	18.5	420	26
	4G4 + 2 x 1.5	5DH1 071	51 x 0.31	2.5	19.0	21.5	570	35
	4G6 + 2 x 1.5	5DH1 072	75 x 0.31	3.2	21.0	23.5	720	45
	4G10 + 2 x 1.5	5DH1 073	77 x 0.26	4.1	26.5	30.0	1170	62
	4G16 + 2 x 1.5	5DH1 074	123 x 0.41	5.6	26.5	30.0	1310	83
	4G25 + 2 x 1.5	5DH1 075	190 x 0.41	6.8	31.5	35.0	1910	110
	4G35 + 2 x 1.5	5DH1 076	268 x 0.41	8.1	35.0	38.5	2460	135