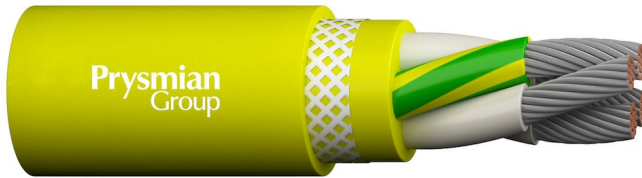


## CORDAFLEX (SMK) (N)SHTOEU 0,6/1KV

Low voltage reeling cables



Flexible low voltage reeling cable for application under high and very high mechanical stresses.

### STANDARDS / APPROVALS



Based on DIN VDE 0250-814

VDE Reg. Nr. 7519

DIN VDE 0295 / DIN EN 60228 / IEC 60228

DIN VDE 0207-20

DIN VDE 0207-21

DIN VDE 0298-3

DIN VDE 0298-4

DIN EN 60811-404 / IEC 60811-404

DIN EN 60332-1-2 / IEC 60332-1-2

Reversed bending; roller bending; torsional stress

General

Certifications / Approvals

Conductor

Compound

Compound

Application

Electrical parameters

Chemical behaviour

Fire performance

Mechanical parameters

### CABLE DESIGN

Conductor

Very finely stranded copper, tinned (class FS)

Core insulation material

EPR rubber

-

PROTOLON MS

-

Special compound > 3GI3

Core arrangement

Laid-up in a maximum of 3 layers

(where applicable) Individual Screen made of tinned copper braid, with coverage: individual 60%; TSP 80%

Material inner sheath

Rubber - polychloroprene (PCP)

-

PROTOFIRM

-

Special compound > 5GM5

Armouring/reinforcement

Braiding

Armouring/reinforcement material

Polyester

Material outer sheath

Rubber - polychloroprene (PCP)

-

PROTOFIRM

-

Special compound > 5GM5

## ELECTRICAL PARAMETERS

Rated voltage U <sub>0</sub> /U (Um)	0.6/1 (1.2) kV
Test voltage [kV]	3.5
AC test voltage (control cores) [kV]	3.5
Nominal voltage U [V]	1,000

## THERMAL PARAMETERS

Max. conductor temperature [°C]	90
Max. conductor temperature at short circuit [°C]	250
Ambient temperature fix installation (min) [°C]	-50
Ambient temperature fix installation (max) [°C]	80
Ambient temperature flexible installation (min) [°C]	-35
Ambient temperature flexible installation (max) [°C]	80

## CHEMICAL PARAMETERS

Oil resistant	Yes
Ozone resistance	Yes
Resistant to UV	Yes
Sea water resistance	Yes

## OPTICAL FIBER PROPERTIES

Fiber type	G62,5/125 µm Multi-mode graded index	G50/125 µm Multi-mode graded index	E9/125 µm Single-mode graded index
Cladding diameter	125 µm	125 µm	125 µm
Fiber diameter	250 µm	250 µm	250 µm
Attenuation at 850 nm	< 3,3 dB/km	< 2,8 dB/km	
Attenuation at 1310 nm	< 0,9 dB/km	< 0,8 dB/km	< 0,4 dB/km
Attenuation at 1550 nm			< 0,3 dB/km
Bandwidth at 850 nm	> 400 MHz	> 400 MHz	
Bandwidth at 1310 nm	> 600 MHz	> 1200 MHz	
Numerical Aperture	0,275 +/- 0,02	0,2 +/- 0,02	0,14 +/- 0,02
Chromatic Dispersion at 1300 nm			< 3,5 ps/nm km
Chromatic Dispersion at 1550 nm			< 18 ps/nm km

## MECHANICAL PARAMETERS

Torsional stress +/- [°/m]	50
Permanent tensile strength (rule)	30 N/mm <sup>2</sup>
Travel speed	- Gantry (reeling operation): no restriction. It is recommended to consult the manufacturer for speeds beyond 240m/min - Trolley (festoon operation): up to 240 m/min.
Bending radius (rule)	Acc. to VDE 0298-3: 4 X D fixed installation 5 X D flexible operation 20 X D min distance with S-type directional changes

## CABLE PROPERTIES

Basic construction	SAP code	External code	Diameter conductor [mm]	Cable diameter (min) [mm]	Cable diameter (max) [mm]	Cable weight [kg/km]
3x35+3x16/3	20004037	5DH3121	8.4	28.7	31.7	1,990
3x1,5	20007588	5DH3129	1.6	11.7	13.3	210
3x2,5	20004036	5DH3111	2	12.7	14.3	270
4x1,5	20004045	5DH3130	1.6	12.2	13.8	240
4x2,5	20004046	5DH3131	2	13.2	14.8	300
4x4	20004047	5DH3132	3	16	18	450
4x6	20004048	5DH3133	3.6	17.4	19.4	600
4x10	20004049	5DH3134	4.6	21.6	23.6	900
4x16	20004050	5DH3135	5.6	23.7	26.7	1,270
4x25	20004051	5DH3136	7.3	28.5	31.5	1,850
4x35	20413459	5DH3***	8.4	37.5	40.5	2,780
5x1,5	20004052	5DH3140	1.6	13	14.6	280
4x50+1x(7x2,5)	20434434	5DH3***	10.3	43.5	46.5	3,960
5x2,5	20004053	5DH3141	2	14.2	15.8	350
5x4	20014479	5DH3151	3	17.4	19.4	550
5x6	20004056	5DH3152	3.6	19	21	690
5x10	20004057	5DH3153	4.6	23.4	25.4	1,070
5x16	20004058	5DH3154	5.6	26.1	29.1	1,500
5x25	20004059	5DH3155	7.3	33.7	36.7	2,340
7x1,5	20004054	5DH3142	1.6	15.2	17.2	390
7x2,5	20004055	5DH3143	2	16.6	18.6	500
12x1,5	20004061	5DH3161	1.6	21.4	23.4	720
12x2,5	20004064	5DH3171	2	23.4	25.4	910
18x1,5	20004062	5DH3162	1.6	21.3	23.3	770
18x2,5	20004065	5DH3172	2	23.3	25.3	1,010
24x1,5	20004063	5DH3163	1.6	23.8	26.8	1,020
24x2,5	20004066	5DH3173	2	26.2	29.2	1,340
24x6	20004094	5DH3268	3.6	40.8	43.8	3,060
30x1,5	20135223	5DH3164	1.6	26.5	29.5	1,240
30x2,5	20004067	5DH3174	2	29.4	32.4	1,660
36x1,5	20024745	5DH3165	1.6	26.5	29.5	1,290
36x2,5	20004068	5DH3175	2	30.3	33.3	1,750
44x1,5	20155531	5DH3166	1.6	29.5	32.5	1,530

## CABLE PROPERTIES

Basic construction	SAP code	External code	Diameter conductor [mm]	Cable diameter (min) [mm]	Cable diameter (max) [mm]	Cable weight [kg/km]
44x2,5	20004069	5DH3176	2	34.1	37.1	2,180
56x1,5	20054721	5DH3167	1.6	35.9	38.9	2,040
56x2,5	20004070	5DH3177	2	40.1	43.1	2,870
3x(2x1)C	20004074	5DH3186	1.3	22	24	730
6x(2x1)C	20004075	5DH3188	1.3	28.9	31.9	1,300
9x(2x1)C	20004076	5DH3189	1.3	39.3	42.3	2,150
12x(2x1)C	20153483	5DH3206	1.3	38.9	40.9	2,170
12x(2x2,5)C	20233251	5DH3***	2	46.6	49.6	3,150
12x1(C)	20007925	5DH3183	1.3	22.9	25.9	880
12x2,5+12x1(C)	20004073	5DH3184	2	27.2	30.2	1,280
19x2,5+5x1(C)	20004071	5DH3180	2	26.2	29.2	1,310
19x2,5+5x1,5(C)	20037707	5DH3222	2	31	34	1,580
25x2,5+5x1(C)	20004072	5DH3181	2	29.4	32.4	1,640
24x1,5+ 6x(2G62,5LWL)	20040297	5DH3257	1.6	26.6	29.6	1,180
24x1,5+ 6x(2G50LWL)	20025841	5DH3255	1.6	26.6	29.6	1,180
24x1,5+ 12x(2E9LWL)	20025742	5DH3254	1.6	26.5	29.5	1,200
20x2,5+ 6x(3G62,5LWL)	20070669	5DH3170	2	28.4	31.4	1,280
20x2,5+ 6x(3E9LWL)	20004087	5DH3234	2	28.4	31.4	1,290
24x2,5+ 6x(1G62,5LWL)	20181295	5DH3197	2	29.4	32.4	1,520
24x2,5+ 6x(2E9LWL)	20040470	5DH3194	2	29.4	32.4	1,520
28x2,5+ 2x(3G50LWL)	20009380	5DH3249	2	29.4	32.4	1,590
30x2,5+ 6x(3E9LWL)	20154112	5DH3169	2	30.2	33.3	1,640

## CABLE PROPERTIES ELECTRICAL / MECHANICAL

Basic construction	SAP code	External code	Max. tensile strength [N]	Bending radius moving (min) [mm]	Conductor resistance at 20° C [Ohm/km]	Current carrying capacity [A]
3x35+3x16/3	20004037	5DH3121	3,150	159	0.565	162
3x1,5	20007588	5DH3129	130	67	13.7	23
3x2,5	20004036	5DH3111	220	72	8.21	30
4x1,5	20004045	5DH3130	180	69	13.7	23
4x2,5	20004046	5DH3131	300	74	8.21	30
4x4	20004047	5DH3132	480	90	5.09	41
4x6	20004048	5DH3133	720	97	3.39	53
4x10	20004049	5DH3134	1,200	118	1.95	74
4x16	20004050	5DH3135	1,920	134	1.24	99
4x25	20004051	5DH3136	3,000	158	0.795	131
4x35	20413459	5DH3***	4,200	203	0.565	162
5x1,5	20004052	5DH3140	220	73	13.7	23
4x50+1x(7x2,5)	20434434	5DH3***	6,000	233	0.386	202
5x2,5	20004053	5DH3141	370	79	8.21	30
5x4	20014479	5DH3151	600	97	5.09	41
5x6	20004056	5DH3152	900	105	3.39	53
5x10	20004057	5DH3153	1,500	127	1.95	74
5x16	20004058	5DH3154	2,400	146	1.24	99
5x25	20004059	5DH3155	3,750	184	0.795	131
7x1,5	20004054	5DH3142	310	86	13.7	23
7x2,5	20004055	5DH3143	520	93	8.21	30
12x1,5	20004061	5DH3161	540	117	13.7	23
12x2,5	20004064	5DH3171	900	127	8.21	30
18x1,5	20004062	5DH3162	810	117	13.7	23
18x2,5	20004065	5DH3172	1,350	127	8.21	30
24x1,5	20004063	5DH3163	1,080	134	13.7	23
24x2,5	20004066	5DH3173	1,800	146	8.21	30
24x6	20004094	5DH3268	4,320	219	3.39	53
30x1,5	20135223	5DH3164	1,350	148	13.7	23
30x2,5	20004067	5DH3174	2,250	162	8.21	30
36x1,5	20024745	5DH3165	1,620	148	13.7	23
36x2,5	20004068	5DH3175	2,700	167	8.21	30
44x1,5	20155531	5DH3166	1,980	163	13.7	23

## CABLE PROPERTIES ELECTRICAL / MECHANICAL

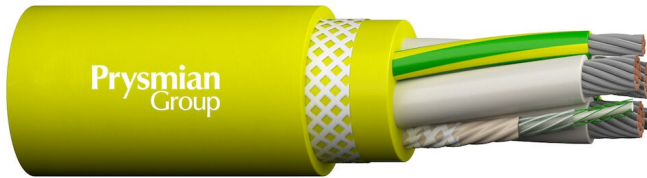
Basic construction	SAP code	External code	Max. tensile strength [N]	Bending radius moving (min) [mm]	Conductor resistance at 20° C [Ohm/km]	Current carrying capacity [A]
44x2,5	20004069	5DH3176	3,300	186	8.21	30
56x1,5	20054721	5DH3167	2,520	195	13.7	23
56x2,5	20004070	5DH3177	4,200	216	8.21	30
3x(2x1)C	20004074	5DH3186	180	120	20	18
6x(2x1)C	20004075	5DH3188	360	160	20	18
9x(2x1)C	20004076	5DH3189	540	212	20	18
12x(2x1)C	20153483	5DH3206	720	205	20	18
12x(2x2,5)C	20233251	5DH3***	1,800	248	8.21	30
12x1(C)	20007925	5DH3183	360	130	20	18
12x2,5+12x1(C)	20004073	5DH3184	900	151	8.21	30
19x2,5+5x1(C)	20004071	5DH3180	1,420	146	8.21	30
19x2,5+5x1,5(C)	20037707	5DH3222	1,420	170	8.21	30
25x2,5+5x1(C)	20004072	5DH3181	1,870	162	8.21	30
24x1,5+ 6x(2G62,5LWL)	20040297	5DH3257	1,080	148	13.7	23
24x1,5+ 6x(2G50LWL)	20025841	5DH3255	1,080	148	13.7	23
24x1,5+ 12x(2E9LWL)	20025742	5DH3254	1,080	148	13.7	23
20x2,5+ 6x(3G62,5LWL)	20070669	5DH3170	1,500	157	8.21	30
20x2,5+ 6x(3E9LWL)	20004087	5DH3234	1,500	157	8.21	30
24x2,5+ 6x(1G62,5LWL)	20181295	5DH3197	1,800	162	8.21	30
24x2,5+ 6x(2E9LWL)	20040470	5DH3194	1,800	162	8.21	30
28x2,5+ 2x(3G50LWL)	20009380	5DH3249	2,100	162	8.21	30
30x2,5+ 6x(3E9LWL)	20154112	5DH3169	2,250	167	8.21	30

Current carrying capacity acc. VDE 0298-4, Tab. 15, on a surface at 30°C ambient temperature.

Design with 6, 12, 18 or 24 fibers, in G62,5, G50 and E9 available upon request. Further combination with different fiber types is also possible.

## CORDAFLEX (SMK) LWL (N)SHTOEU 0,6/1KV

Low voltage reeling cables for E-RTG's



Flexible low voltage reeling cable for power supply (also with integrated fiber optics), suitable for application under high and very high mechanical stresses. The main application is reeling operation on ERTG's (Electrified Rubber Tyred Gantry cranes).

### STANDARDS / APPROVALS



Based on DIN VDE 0250-814

VDE Reg. Nr. 7519

DIN VDE 0298-3

DIN VDE 0207-20

DIN VDE 0295 / DIN EN 60228 / IEC 60228

DIN VDE 0207-21

DIN VDE 0298-4

DIN EN 60811-404 / IEC 60811-404

DIN EN 60332-1-2 / IEC 60332-1-2

Reversed bending; roller bending; torsional stress

General

Certifications / Approvals

Application

Compound

Conductor

Compound

Electrical parameters

Chemical behaviour

Fire performance

Mechanical parameters

### CABLE DESIGN

Conductor

Very finely stranded copper, tinned (class FS)

Core insulation material

EPR rubber

-

PROTOLON MS

-

Special compound > 3GI3

Core arrangement

Three core design, with split earth conductor and, where applicable, optical element in the interstices;

Optical element: six tubes, laid up around a central support element, each with one, two, three or four optical fibers

Material inner sheath

Rubber - polychloroprene (PCP)

-

PROTOFIRM

-

Special compound > 5GM5

Armouring/reinforcement

Braiding

Armouring/reinforcement material

Polyester

Material outer sheath

Rubber - polychloroprene (PCP)

-

PROTOFIRM

-

Special compound > 5GM5

## ELECTRICAL PARAMETERS

Rated voltage U <sub>0</sub> /U (Um)	0.6/1 (1.2) kV
Test voltage [kV]	3.5
Nominal voltage U [V]	1,000

## THERMAL PARAMETERS

Max. conductor temperature [°C]	90
Max. conductor temperature at short circuit [°C]	250
Ambient temperature fix installation (min) [°C]	-50
Ambient temperature fix installation (max) [°C]	80
Ambient temperature flexible installation (min) [°C]	-35
Ambient temperature flexible installation (max) [°C]	80

## CHEMICAL PARAMETERS

Oil resistant	Yes
Ozone resistance	Yes
Resistant to UV	Yes
Sea water resistance	Yes

## OPTICAL FIBER PROPERTIES

Fiber type	G62,5/125 µm Multi-mode graded index	G50/125 µm Multi-mode graded index	E9/125 µm Single-mode graded index
Cladding diameter	125 µm	125 µm	125 µm
Fiber diameter	250 µm	250 µm	250 µm
Attenuation at 850 nm	< 3,3 dB/km	< 2,8 dB/km	
Attenuation at 1310 nm	< 0,9 dB/km	< 0,8 dB/km	< 0,4 dB/km
Attenuation at 1550 nm			< 0,3 dB/km
Bandwidth at 850 nm	> 400 MHz	> 400 MHz	
Bandwidth at 1310 nm	> 600 MHz	> 1200 MHz	
Numerical Aperture	0,275 +/- 0,02	0,2 +/- 0,02	0,14 +/- 0,02
Chromatic Dispersion at 1300 nm			< 3,5 ps/nm km
Chromatic Dispersion at 1550 nm			< 18 ps/nm km

## MECHANICAL PARAMETERS

Torsional stress +/- [°/m]	50
Permanent tensile strength (rule)	30 N/mm <sup>2</sup>
Travel speed	- Gantry (reeling operation): no restriction. It is recommended to consult the manufacturer for speeds beyond 240m/min - Trolley (festoon operation): up to 240 m/min.
Bending radius (rule)	Acc. to VDE 0298-3: 4 X D fixed installation 5 X D flexible operation 20 X D min distance with S-type directional changes



## CABLE PROPERTIES

Basic construction	SAP code	External code	Diameter conductor [mm]	Cable diameter (min) [mm]	Cable diameter (max) [mm]	Cable weight [kg/km]
3x50+3x25/3	20004038	5DH3122	10.3	34.4	37.4	2,810
3x70+3x35/3	20004039	5DH3123	12	39.7	42.7	3,860
3x95+3x50/3	20004040	5DH3124	14	44.3	47.3	4,950
3x120+3x70/3	20004041	5DH3125	15.8	51	55	6,440
3x150+3x70/3	20004042	5DH3126	17.5	53.9	57.9	7,500
3x185+3x95/3	20004043	5DH3127	19.4	58.9	62.9	8,990
3x240+3x120/3	20004044	5DH3128	22.5	67.4	71.4	11,940
3x300+3x150/3	20051390	5DH3119	25.2	75.6	79.6	14,740
3x35+2x16/2+ 1x(6G62,5)	SMK_1KV_003	5DH3***	8.4	35.7	38.7	2,390
3x50+2x25/2+ 1x(6G62,5)	SMK_1KV_004	5DH3***	10.3	39.9	42.9	3,220
3x70+2x35/2+ 1x(6G62,5)	20170684	5DH3***	12	43.7	46.7	4,200
3x95+2x50/2+ 1x(6G62,5)	SMK_1KV_005	5DH3***	14	47.6	50.6	5,220
3x120+2x70/2+ 1x(6G62,5)	20368424	5DH3***	15.8	54	58	6,700
3x150+2x70/2+ 1x(6G62,5)	20196602	5DH3283	17.5	57	61	7,750
3x185+2x95/2+ 1x(24E9)	20271496	5DH3***	19.4	61.9	65.9	9,300
3x185+2x95/2+ 1x(6G62,5)	20155139	5DH3284	19.4	61.9	65.9	9,300
3x240+2x120/2+ 1x(6G62,5)	20168346	5DH3***	22.5	69.7	73.7	12,320
3x300+2x150/2+ 1x(6G62,5)	SMK_1KV_002	5DH3***	25.2	78	82	15,000

## CABLE PROPERTIES ELECTRICAL / MECHANICAL

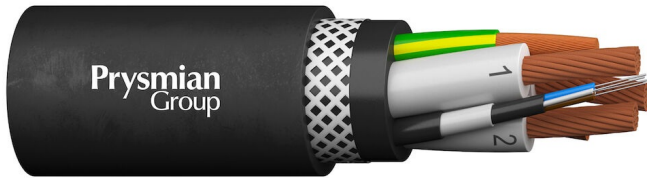
Basic construction	SAP code	External code	Max. tensile strength [N]	Bending radius moving (min) [mm]	Conductor resistance at 20° C [Ohm/km]	Current carrying capacity [A]
3x50+3x25/3	20004038	5DH3122	4,500	187	0.39	202
3x70+3x35/3	20004039	5DH3123	6,300	214	0.28	250
3x95+3x50/3	20004040	5DH3124	8,550	237	0.21	301
3x120+3x70/3	20004041	5DH3125	10,800	275	0.16	352
3x150+3x70/3	20004042	5DH3126	13,500	290	0.13	404
3x185+3x95/3	20004043	5DH3127	16,650	315	0.11	461
3x240+3x120/3	20004044	5DH3128	21,600	357	0.08	540
3x300+3x150/3	20051390	5DH3119	27,000	398	0.07	620
3x35+2x16/2+ 1x(6G62,5)	SMK_1KV_003	5DH3***	3,150	194	0.565	162
3x50+2x25/2+ 1x(6G62,5)	SMK_1KV_004	5DH3***	4,500	215	0.393	202
3x70+2x35/2+ 1x(6G62,5)	20170684	5DH3***	6,300	234	0.277	250
3x95+2x50/2+ 1x(6G62,5)	SMK_1KV_005	5DH3***	8,550	253	0.21	301
3x120+2x70/2+ 1x(6G62,5)	20368424	5DH3***	10,800	290	0.164	352
3x150+2x70/2+ 1x(6G62,5)	20196602	5DH3283	13,500	305	0.132	404
3x185+2x95/2+ 1x(24E9)	20271496	5DH3***	16,650	330	0.108	461
3x185+2x95/2+ 1x(6G62,5)	20155139	5DH3284	16,650	330	0.108	461
3x240+2x120/2+ 1x(6G62,5)	20168346	5DH3***	21,600	369	0.0817	540
3x300+2x150/2+ 1x(6G62,5)	SMK_1KV_002	5DH3***	27,000	410	0.0654	620

Current carrying capacity acc. VDE 0298-4, Tab. 15, on a surface at 30°C ambient temperature.

Design with 6, 12, 18 or 24 fibers, in G62,5, G50 and E9 available upon request. Further combination with different fiber types is also possible.

## CORDAFLEX (SMK -200) (N)SHTOEU 0,6/1KV

Low voltage reeling cables



Flexible low voltage reeling cable for application under high mechanical stresses.

### STANDARDS / APPROVALS

Based on DIN VDE 0250-814

DIN VDE 0295 / DIN EN 60228 / IEC 60228

DIN VDE 0207-20

DIN VDE 0207-21

DIN VDE 0298-3

DIN VDE 0298-4

DIN EN 60811-404 / IEC 60811-404

General

Conductor

Compound

Compound

Application

Electrical parameters

Chemical behaviour

### CABLE DESIGN

Conductor

Finely stranded copper, bare (class 5)

Core insulation material

EPR rubber

-

PROTOLON MS

-

Special compound > 3GI3

Core arrangement

Three core design, with split earth conductor in three interstices or with FO

Material inner sheath

EPR rubber

Armouring/reinforcement

Braiding

Armouring/reinforcement material

Polyester

Material outer sheath

Rubber - polychloroprene (PCP)

-

Special compound > 5GM5

## ELECTRICAL PARAMETERS

Rated voltage U <sub>0</sub> /U (Um)	0.6/1 (1.2) kV
Test voltage [kV]	3.5
AC test voltage (control cores) [kV]	3.5

## THERMAL PARAMETERS

Max. conductor temperature [°C]	90
Max. conductor temperature at short circuit [°C]	250
Ambient temperature fix installation (min) [°C]	-50
Ambient temperature fix installation (max) [°C]	80
Ambient temperature flexible installation (min) [°C]	-35
Ambient temperature flexible installation (max) [°C]	80

## CHEMICAL PARAMETERS

Oil resistant	Yes
Ozone resistance	Yes
Resistant to UV	Yes
Sea water resistance	Yes

## OPTICAL FIBER PROPERTIES

Fiber type	G62,5/125 µm Multi-mode graded index	G50/125 µm Multi-mode graded index	E9/125 µm Single-mode graded index
Cladding diameter	125 µm	125 µm	125 µm
Fiber diameter	250 µm	250 µm	250 µm
Attenuation at 850 nm	< 3,3 dB/km	< 2,8 dB/km	
Attenuation at 1310 nm	< 0,9 dB/km	< 0,8 dB/km	< 0,4 dB/km
Attenuation at 1550 nm			< 0,3 dB/km
Bandwidth at 850 nm	> 400 MHz	> 400 MHz	
Bandwidth at 1310 nm	> 600 MHz	> 1200 MHz	
Numerical Aperture	0,275 +/- 0,02	0,2 +/- 0,02	0,14 +/- 0,02
Chromatic Dispersion at 1300 nm			< 3,5 ps/nm km
Chromatic Dispersion at 1550 nm			< 18 ps/nm km

## MECHANICAL PARAMETERS

Torsional stress +/- [°/m]	50
Permanent tensile strength (rule)	20 N/mm <sup>2</sup> static 25 N/mm <sup>2</sup> dynamic
Travel speed	Reeling operation: - 160 m/min (center-feed) - 200 m/min (end-feed)
Bending radius (rule)	Acc. to VDE 0298-3: 4 X D fixed installation 5 X D flexible operation 20 X D min distance with S-type directional changes

## CABLE PROPERTIES

Basic construction	SAP code	External code	Diameter conductor [mm]	Cable diameter (min) [mm]	Cable diameter (max) [mm]	Cable weight [kg/km]
3x35+3x16/3	20435776	5DH3*	8.4	27.4	30.4	1,850
3x35+2x16/2+1x(12G62,5LWL)	20415380	5DH3*	8.4	33.5	36.5	2,200
3x50+3x25/3	20435777	5DH3*	9.4	30.8	33.8	2,450
3x50+2x25/2+1x(12G62,5LWL)	20435931	5DH3*	9.4	36.8	39.8	3,000
3x70+3x35/3	20435778	5DH3*	11.5	37.2	40.2	3,550
3x70+2x35/2+1x(12E9LWL)	20412582	5DH3*	11.5	41.5	44.5	4,000
3x95+3x50/3	20411877	5DH3*	12.8	43.3	46.3	4,700
3x95+2x50/2+1x(24E9LWL)	20410358	5DH3*	12.8	44.9	47.9	4,920
3x120+3x70/3	20409505	5DH3*	14.7	46.1	49.1	5,700
3x120+2x70/2+1x(24E9LWL)	20416366	5DH3*	14.7	51.5	55.5	6,480
3x150+3x70/3	20435779	5DH3*	16.5	52	56	7,100
3x150+2x70/2+1x(24E9LWL)	20416365	5DH3*	16.5	54.3	58.3	7,450
3x185+3x95/3	20420622	5DH3*	18.2	57.5	61.5	7,700
3x185+2x95/2+1x(24E9LWL)	20410359	5DH3*	18.2	61.3	65.3	9,350
3x240+3x120/3	20435780	5DH3*	21.2	64.4	68.4	11,100
3x240+2x120/2+1x(12E9LWL)	20423023	5DH3*	21.2	67.3	71.3	11,900
3x300+3x150/3	20409504	5DH3*	23.6	70.3	74.3	13,350
3x300+2x150/2+1x(12E9LWL)	20410401	5DH3*	23.6	74.8	78.8	14,360

## CABLE PROPERTIES ELECTRICAL / MECHANICAL

Basic construction	SAP code	External code	Max. tensile strength [N]	Bending radius moving (min) [mm]	Conductor resistance at 20° C [Ohm/km]	Current carrying capacity [A]
3x35+3x16/3	20435776	5DH3*	2,100	183	0.554	162
3x35+2x16/2+1x(12G62,5LWL)	20415380	5DH3*	2,100	219	0.554	162
3x50+3x25/3	20435777	5DH3*	3,000	203	0.386	202
3x50+2x25/2+1x(12G62,5LWL)	20435931	5DH3*	3,000	239	0.386	202
3x70+3x35/3	20435778	5DH3*	4,200	242	0.272	250
3x70+2x35/2+1x(12E9LWL)	20412582	5DH3*	4,200	223	0.272	250
3x95+3x50/3	20411877	5DH3*	5,700	232	0.206	301
3x95+2x50/2+1x(24E9LWL)	20410358	5DH3*	5,700	240	0.206	301
3x120+3x70/3	20409505	5DH3*	7,200	246	0.161	352
3x120+2x70/2+1x(24E9LWL)	20416366	5DH3*	7,200	278	0.161	352
3x150+3x70/3	20435779	5DH3*	9,000	336	0.13	404
3x150+2x70/2+1x(24E9LWL)	20416365	5DH3*	9,000	292	0.13	404
3x185+3x95/3	20420622	5DH3*	11,100	308	0.106	461
3x185+2x95/2+1x(24E9LWL)	20410359	5DH3*	11,100	327	0.106	461
3x240+3x120/3	20435780	5DH3*	14,400	411	0.08	540
3x240+2x120/2+1x(12E9LWL)	20423023	5DH3*	14,400	357	0.08	540
3x300+3x150/3	20409504	5DH3*	18,000	372	0.064	620
3x300+2x150/2+1x(12E9LWL)	20410401	5DH3*	18,000	394	0.064	620

Current carrying capacity acc. VDE 0298-4, Tab. 15, on a surface at 30°C ambient temperature.

Design with 12 or 24 fibers, in G62,5, G50 and E9 available upon request. Further combination with different fiber types is also possible.