FLEXIDRUM® NSHTÖU

Suitable for reeling application

Suitable for festoon application

Construction:

Conductor:	flexible tinned copper conductor Cl. 5, acc to IEC 60228, DIN VDE 0295
Insulation:	rubber HEPR type 3GI3 acc. to DIN VDE 0207
Cores color:	acc. to DIN VDE 0293-308, HD 308 S2 from 6 cores black cores with consecutive numbers acc. to EN 50334; green-yellow earth-wire from 3 cores
Stranding:	in layers with short lay-length
Wrapping:	non-woven tape
Inner sheath:	rubber EPR type GM1B
Supporting screen:	anti-twisting protection of high-tech yarns
Outer sheath:	black (similar to RAL 9005), rubber pcp type, 5GM2

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Technical data:

Nominal voltage:	Uo/U 0,6/1 kV Max. 1,2 kV
Test voltage:	3,5 kV
Max voltage permissible in A.C.:	0,9/1,8 kV
Temperature range:	
Fixed laying:	-45°C up to +80°C
Flexible appication:	-35°C up to +80°C
Min. bending radius:	acc. to DIN VDE 0298 part 3
Conductor resistance:	as per VDE 0295 Class 5
Insulation resistance:	> 20 MOhm x km
Tensile strength:	20 N/mm^2
Max speed (main application):	180 m/min

Features:

UV and chemical resistant

acc. to standard DIN VDE 0250 part 814

on request yellow version

UL types on request
possible use in festoon systems up to 240 m/min

VDE approved

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS and CE approval

RoHS CE

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Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
01010G7L010M61	1x10	10,5	96	200	200	8
01010G7L010M62	1x16	11,6	153	265	320	6
01010G7L010M63	1x25	13,3	240	370	500	4
01010G7L010M64	1x35	15	336	505	700	2
01010G7L010M65	1x50	17,2	480	650	1000	0
01010G7L010M66	1x70	18,6	672	875	1400	2/0
01010G7L010M67	1x95	21	912	1120	1900	3/0
01010G7L010M68	1x120	24	1152	1440	2400	4/0
01010G7L010M69	1x150	26	1440	1730	3000	250 MCM
01010G7L010M70	1x185	27,7	1776	2070	3700	350 MCM
01010G7L010M71	1x240	30,5	2304	2660	4800	450 MCM
01010G72031M15	3G1,5	13	43,2	255	68	16
01010G72031M25	3G2,5	14,5	72	310	113	14
01010G72031M40	3G4	16	115	395	240	12
01010G72031M60	3G6	18,2	172	525	360	10
01010G72031M61	3G10	21,3	288	765	600	8
01010G72031M62	3G16	24,6	460	1080	960	6
01010G72031M63	3G25	28	720	1470	1500	4
01010G72031M64	3G35	32	1008	2030	2100	2
01010G72031M65	3G50	37	1440	2680	3000	0
01010G72031M66	3G70	41	2016	3530	4200	2/0
01010G72031M67	3G95	45,5	2736	4400	5700	3/0
01010G72031M68	3G120	51,5	3456	5730	7200	4/0
01010G72031M69	3G150	57,5	4320	7040	9000	250 MCM
01010G72031M70	3G185	62	5328	8320	11100	350 MCM
01010G72031M71	3G240	70	6912	10850	14400	450 MCM
01010G72037M65	3x50 + 3G25/3	35,8	1680	2730	3000	0
01010G72037M66	3x70 + 3G35/3	41,2	2352	3740	4200	2/0
01010G72037M67	3x95 + 3G50/3	45,5	3216	4690	5700	3/0
01010G72037M68	3x120 + 3G70/3	51,7	4128	6220	7200	4/0
01010G72037M69	3x150 + 3G70/3	57,5	4992	7480	9020	250 MCM
01010G72037M70	3x185 + 3G95/3	62	6240	9020	11100	350 MCM
01010G72037M71	3x240 + 3G120/3	69,8	8064	11760	14400	450 MCM
01010G72037M72	3x300 + 3G150/3	72,5	9429	13946	21000	550 MCM
01010G72041M15	4G1,5	14,3	58	285	90	16
01010G72041M25	4G2,5	15,3	96	355	150	14
01010G72041M40	4G4	17	154	460	320	12
01010G72041M60	4G6	19,5	230	615	480	10
01010G72041M61	4G10	23	384	920	800	8
01010G72041M62	4G16	26,5	614	1310	1280	6
01010G72041M63	4G25	31,2	960	1860	2000	4
01010G72041M64	4G35	34,8	1344	2490	2800	2
01010G72041M65	4G50	40	1920	3300	4000	0
01010G72041M66	4G70	44	2688	4420	5600	2/0
01010G72041M67	4G95	50,8	3684	5610	7600	3/0
01010G72041M68	4G120	58	4608	7360	9600	4/0
01010G72041M69	4G150	63,2	5760	8770	12000	250 MCM
01010G72041M70	4G185	69,8	7100	10730	14800	350 MCM
01010G72041M71	4G240	76,2	9216	13560	19200	450 MCM
01010G72051M15	5G1,5	15	72	320	113	16
01010G72051M25	5G2,5	16,8	120	410	188	14
01010G72051M40	5G4	19	192	575	400	12
01010G72051M60	5G6	21	308	725	600	10
01010G72051M61	5G10	25,5	480	1140	1000	8
01010G72051M62	5G16	28,6	768	1550	1600	6
01010G72051M63	5G25	34,3	1200	2170	2500	4
01010G72051M64	5G35	38,5	1680	3080	3500	2
01010G72051M65	5G50	43,8	2400	4010	5000	0
01010G72051M66	5G70	50,2	3360	5480	7000	2/0
01010G72051M67	5G95	56,8	4560	7010	9500	3/0
01010G72048M61	4G10 + 4x2,5	24,3	480	1060	800	8
01010G72048M62	4G16 + 4x2,5	26,6	710	1360	1280	16
01010G72048M63	4G25 + 4x2,5	31,2	1056	1910	2000	16
01010G72048M64	4G35 + 4x2,5	34,5	1440	2530	2800	16
01010G72048M65	4G50 + 4x4	39,6	2073	3370	4000	0

FLEXIDRUM® NSHTÖU

Suitable for reeling application

Suitable for festoon application

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
01010G70071M15	7G1,5	16,8	101	415	158	16
01010G70121M15	12G1,5	20,1	173	585	270	16
01010G70181M15	18G1,5	22,7	259	765	405	16
01010G70241M15	24G1,5	26,7	346	1040	540	16
01010G70301M15	30G1,5	27,7	432	1140	675	16
01010G70361M15	36G1,5	30,2	518	1370	810	16
01010G70421M15	42G1,5	31,8	564	1565	945	16
01010G70071M25	7G2,5	19,1	168	570	263	14
01010G70121M25	12G2,5	22,2	288	760	450	14
01010G70181M25	18G2,5	25,7	432	1070	675	14
01010G70241M25	24G2,5	30,2	576	1450	900	14
01010G70301M25	30G2,5	31,5	720	1600	1125	14
01010G70361M25	36G2,5	33,4	864	1850	1350	14
01010G70071M40	7G4	21,5	268	1850	420	12
01010G70071M60	7G6	26,3	429	960	630	10
01010G70121M40	12G4	26	460	1851	720	12
01010G70181M40	18G4	29,4	691	1852	1080	12
01010G71032M10	3x(2x1)C	22	-	670	90	18
01010G71032M15	3x(2x1,5)C	22,5	166	740	135	16
01010G71032M25	3x(2x2,5)C	25,5	227	980	-	14
01010G71062M10	6x(2x1)C	28	-	1080	180	18
01010G71062M15	6x(2x1,5)C	29,3	319	1210	270	16
01010G71062M25	6x(2x2,5)C	32,1	480	1570	450	14
01010G72049900	4G16+2x(4x1,5)	32,4	729,6	1550	1280	14
01010G70199901	19G2,5 + 5x1(C)	32,2	556	1580	713	14
01010G70199902	19G2,5 + 5x1,5(C)	33,7	566	1630	713	14
01010G70259903	25G2,5 + 5x1(C)	34,2	700	1820	938	14
01010G70259904	25G2,5 + 5x1,5(C)	34,2	711	1850	938	14
01010G70269905	26G2,5 + 10x1 (C)	37,8	-	2150	975	14
01010G70169906	16G4+(45x1)(C)	46	1028	2808	2180	12
01010G72048908	4G25+4x(6x2,5)	51,8	1499	3390	-	14
01010G72049911	4G25+7x1,5	36,8	1060	2330	2000	4
01010G72049912	4G25+3x(4x2,5)+1x(5x2,5)	49,7	1360	3800	2000	4
01010G7203B913	3x150+2x70/2+1x(6x2,5)	62,9	4800	7138	-	250 MCM
01010G71079914	7x(5x2,5)+12FO	52,5	857	3699	-	14
01010G7303B915	3x16+2x(3x4)	28,4	691,2	1330	-	6
01010G72049916	4G25+17x2,5	49,7	1368	3450	2000	4
01010G70059919	5G35+1x(6FO E9/125)	Max. 48,3	1678	3764	-	2
01010G71209920	5x(4x2,5)+1x(12FO 62,5/125)	Max. 39	455	1840	-	12
01010G72049923	4G16+1x(4x1)C+6FO E9/125	32,4	664	1700	1280	6
01010G7203B924	3x95+2G50/2+24FO E9/125	Max. 52,8	2940	5140	-	3/0
01010G7203B925	3x120+2G70/2+12FO E9/125	Max. 59	3990	6680	-	4/0
01010G70049926	4G25+7x2,5+ 12FO E9/125	51	1260	3350	-	4

Other dimensions and colors available on request.

FLEXIDRUM® NSHTÖU (V)

Suitable for reeling application

Suitable for festoon application

Construction:

Conductor:	flexible tinned copper conductor Cl. 6, up to 6 mm² Flexible tinned copper conductor Cl. 5, from 10 mm²
Insulation:	rubber HEPR type 3GI3
Cores color:	acc. to DIN VDE 0293-308, HD 308 S2 from 6 cores black cores with consecutive numbers acc. to EN 50334; green-yellow earth-wire from 3 cores
Central unit:	special Kevlar
Stranding:	in layers around central unit
inner sheath:	yellow (similar to RAL 1021), rubber PCP compound
Supporting screen:	anti-twisting protection of high-tech yarns
Outer sheath:	yellow (similar to RAL 1021), rubber PCP compound

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Technical data:

Nominal voltage:	Uo/U 0,6/1 kV
Test voltage:	3,5 kV
Max voltage permissible in A.C.:	0,7/1,2 kV
Max voltage permissible in D.C.:	0,9/1,8 kV
Temperature range:	
Fixed laying:	-50°C up to +80°C
Flexible appication:	-40°C up to +80°C
Max. temperature on conductor:	up to +90°C
Max. temperature on short circuit:	up to +200°C
Min. bending radius:	acc. to DIN VDE 0298 part 3
Current carrying capacity:	acc. to DIN VDE 0298-4
Tensile strength:	until 30 N/mm²
Inner torsion strenght:	± 50°/m
Max speed (main application):	240 m/min

Features:

outdoor use, moisture and UV resistant

water stability: proved in a long-period test

vertical use

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS and CE approval

RoHS CE

FLEXIDRUM® NSHTÖU (V)


Suitable for reeling application


Suitable for festoon application

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
01020GY2041M40	4G4	16	153,6	465	2000	12
01020GY2041M60	4G6	18,4	230,4	568	2000	10
01020GY2041M61	4G10	26,1	384,0	1155	2000	8
01020GY2041M62	4G16	29	614,4	1533	2000	6
01020GY2041M63	4G25	34,4	960	2172	2000	4
01020GY2041M64	4G35	37,4	1344	2790	2800	2
01020GY2041M65	4G50	43,4	1920	3715	4000	1
01020GY2041M66	4G70	47,8	2688	4820	5600	2/0
01020GY2041M67	4G95	55,2	3648	6315	7600	3/0
01020GY2051M40	5G4	18,4	192	438	2000	12
01020GY2051M60	5G6	20	288	698	2000	10
01020GY2051M61	5G10	24,4	480	1085	2000	8
01020GY2051M62	5G16	27,6	768	1512	2400	6
01020GY2051M63	5G25	35,8	1200	2200	3750	4
01020GY2037M64	3x35+3G16/3	30	1161,6	2169	3150	2
01020GY2037M65	3x50+3G25/3	35,9	1680	2853	4500	0
01020GY2037M66	3x70+3G35/3	41,2	2352	3915	6300	2/0
01020GY2037M67	3x95+3G50/3	45,8	3216	5025	8550	3/0
01020GY2037M68	3x120+3G70/3	53	4128	6640	10800	4/0
01020GY2037M69	3x150+3G70/3	55,9	4992	7699	13500	250 MCM
01020GY2037M70	3x185+3G95/3	60,9	6240	9318	16650	350 MCM
01020GY2037M71	3x240+3G120/3	69,4	8064	12215	21600	450 MCM
01020GY2041M15	4G1,5	13	57,6	248	2000	16
01020GY2051M15	5G1,5	13,8	72	275	2000	16
01020GY0071M15	7G1,5	18,3	100,8	498	2000	16
01020GY0121M15	12G1,5	24,6	172,8	895	2000	16
01020GY0181M15	18G1,5	25,2	259,2	950	2000	16
01020GY0241M15	24G1,5	29,8	276,5	1056	2000	16
01020GY0301M15	30G1,5	32,4	432	1350	2000	16
01020GY0361M15	36G1,5	33,8	518,4	1400	2000	16
01020GY0441M15	44G1,5	35	633,6	1720	2000	16
01020GY0561M15	56G1,5	36,9	806,4	2215	2520	16
01020GY2031M25	3G2,5	13,8	72	310	2000	14
01020GY2041M25	4G2,5	14,3	96	370	2000	14
01020GY2051M25	5G2,5	15,2	120	439	2000	14
01020GY0071M25	7G2,5	20,9	168	630	2000	14
01020GY0121M25	12G2,5	24,7	288	1132	2000	14
01020GY0181M25	18G2,5	28,8	432	1234	2000	14
01020GY0241M25	24G2,5	31,7	576	1530	2000	14
01020GY0301M25	30G2,5	33,8	720	1810	2000	14
01020GY0361M25	36G2,5	35,9	864	1940	2000	14
01020GY0441M25	44G2,5	40,5	1056	2510	3300	14
01020GY0561M25	56G2,5	44,5	1344	3215	4200	14
01020GY0071M40	7G4	34	268,8	1080	2000	12
01020GY0121M40	12G4	34,4	460,8	1260	2000	12
01020GY0121M40	18G4	27	565,1	1770	2000	12
01020GY1032M10	3x(2x1)C	23	-	330	2000	18
01020GY1062M05	6x(2x0,5)C	24,1	-	402	2000	20
01020GY1062M10	6x(2x1)C	29,9	-	585	2000	18
01020GY1129900	(12x1)C	24,9	-	718	2000	18
01020GY0129901	12G2,5+12x(1)C	27,7	-	1154	2000	14
01020GY0199902	19G2,5+5x(1)C	28,5	545	1561	2000	14
01020GY0259903	25G2,5+5x(1)C	30,9	710	2158	2100	14
01020GY0199904	19G2,5+5x(1,5)C	31,4	594	1595	2000	14
01020GY0248M25	24G2,5+4x(1)C	38,5	665	2060	4000	14

FOR SPREADER APLICATION:

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
01021GY0461M10	46G1	26,5	441,6	970	4700	18
01021GY0491M10	49G1	28,5	470,4	1100	-	18
01021GY0241M25	24G2,5	28,1	576	1200	3800	14
01021GY0301M25	30G2,5	31,3	720	1260	-	14
01021GY0361M25	36G2,5	32	864	1500	5700	14
01021GY0441M25	44G2,5	35,9	1056	1890	6900	14
01021GY0561M25	56G2,5	39	1344	2300	8800	14
01021GY0241M40	24G4	40,2	658	2280	4000	12

Other dimensions and colors available on request.

FLEXIDRUM® R 501

Suitable for reeling application

Suitable for chain application

Construction:

Conductor:	flexible red copper conductor Cl. 5, acc to IEC 60228, DIN VDE 0295
Insulation:	**Power:** rubber EPR special compound **Earth:** XLPE special compound
Cores color:	acc. to DIN VDE 0293-308, HD 308 S2 3 conductors + 3 earth conductors: grey, brown, black and green/yellow divided in interstices
Inner sheath:	special PVC compound
Outer sheath:	yellow (similar to RAL 1021), PUR compound

Technical data:

Nominal voltage:	Uo/U 0,6/1 kV Max.1,2 kV
Test voltage:	3,5 kV
Temperature range:	
Fixed laying:	-30°C up to +80°C
Flexible installation:	-20°C up to +80°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Min. bending radius:	
Fixed laying:	6 x D
For repeated winding action(felxible):	10 x D
Guided on deflection pulleys (felxible):	10 x D
Max speed (main application):	60 m/min

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Features:

tunneling machines!

weather resistance: very good

chemical rsistance: very good

possible version with antitwisting protection
identified with "1" on the 5th number of the Part. no

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS and CE approval

RoHS CE

Applications:

power supply to mobile equipment with high
risk of mechanical damage in mining and tunneling.

FLEXIDRUM® R 501 cable is suitable
for application where it is deflected in one plane only.

Correction factors for ambient temperature other than 30°C

°C	20	25	30	40	45	50	55
K	1,1	1,05	0,95	0,89	0,84	0,77	0,71

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
01040GY2037M63	3x25+3G6	25,5	892,8	1260	1500	4
01040GY2037M64	3x35+3G6	27,5	1180,8	1550	2100	2
01040GY2037M65	3x50+3G10	31	1728	2220	3000	1
01040GY2037M66	3x70+3G16	35,8	2476,8	3110	4200	2/0
01040GY2037M67	3x95+3G16	40,3	3196,8	3770	5700	3/0
01040GY2037M68	3x120+3G25	45,3	4176	4980	7200	4/0
01040GY2037M69	3x150+3G25	50,3	5040	6010	9000	250 MCM
01040GY2037M70	3x185+3G35	54,5	6336	7300	11100	350 MCM
01040GY2037M71	3x240+3G50	61	8352	9450	14400	450 MCM
01040GY2037M72	3x300+3G50	70,5	10080	12315	21000	550 MCM
01040GY203B901	3x25+2G16/2+2x1,5	28,6	902	1660	-	4
01040GY203B902	3x35+2G16/2+2x1,5	29,8	1190	1950	-	2
01040GY203B903	3x50+2G25/2+2x1,5	33,5	1708	2430	-	1
01040GY203B904	3x70+2G35/2+2x1,5	36,1	2380	3510	-	2/0
01040GY203B905	3x95+2G50/2+2x1,5	41,2	3245	4230	-	3/0
01040GY203B906	3x120+2G70/2+2x1,5	46,4	4157	5465	-	4/0
01040GY203B900	3x150+2G70/2+2x1,5	50,7	5020	6420	-	250 MCM
01040GY203B907	3x185+2G95/2+2x1,5	55,9	6268	7600	-	350 MCM
01040GY203B908	3x240+2G150/2+2x1,5	63,5	8380	10040	-	450 MCM
01040GY203B909	3x35+2G16/2+4x1	30,5	1200	2000	-	2
01040GY203B910	3x35+2G16/2+4x1,5	30,5	1220	2050	-	2
01040GY2039911	3x50+3G10+2x1,5	35,4	1708	2610	-	1

Other dimensions and colors available on request.

FLEXIDRUM® R 502

Halogen Free

Suitable for reeling application

Suitable for chain application

Construction:

Conductor:	flexible tinned copper conductor Cl. 5, acc to IEC 60228, DIN VDE 0295
Insulation:	GAALTHERM® 530
Cores color:	acc. to DIN VDE 0293-308, HD 308 S2 from 6 cores black cores with consecutive numbers acc. to EN 50334; green-yellow earth-wire from 3 cores
Central unit:	textile element
Stranding:	in layers around central unit
Wrapping:	non-woven tape over each layer
Inner sheath:	PUR compound
Supporting screen:	anti-twisting protection of textile braid
Outer sheath:	yellow (similar to RAL 1021) or black (similar to RAL 9005) , PUR compound

Technical data:

Nominal voltage:	Uo/U 0,6/1 kV
Test voltage:	4 kV
Temperature range:	
Fixed laying:	-50°C up to +90°C
Flexible installation:	-40°C up to +90°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Min. bending radius:	acc. to DIN VDE 0298 part 3
Max. torsion:	± 25°/1mt.
Max speed (main application):	with anti-twisting: 180 m/min without anti-twisting: 30 m/min

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Halogen-free acc. to:
DIN VDE 0482 part 267,
EN 50267-2-1,
IEC 60754-1

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Features:

UV resistance: very good

chemical rsistance: good

small outer diameter

reduced cable weight

high winding and unwinding strength

possible version without anti-twisting protection identified with "1" on the 5th number of the Part. n

Possible black outer sheath version

for SPEED and MINIMUM BENDING RADIUS see pages from 2 to 8 of catalogue

RoHS and CE approval

RoHS CE

Applications:

FLEXIDRUM® R 502
is used on heavy appliances like motor cable reel hoists, transport systems, movable motors and farm vehicles with high mechanical stress

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
01050GY2041M15	4G1,5	10,2	57,6	160	1875	16
01050GY2051M15	5G1,5	11,1	72	200	2225	16
01050GY0071M15	7G1,5	12,9	100,8	250	2090	16
01050GY0121M15	12G1,5	16,6	172,8	450	2540	16
01050GY0181M15	18G1,5	16,8	259,2	500	2540	16
01050GY0241M15	24G1,5	19,5	345,6	700	2740	16
01050GY0301M15	30G1,5	22,5	432	850	2840	16
01050GY0361M15	36G1,5	25	518,4	880	2840	16
01050GY0421M15	42G1,5	27,2	604,8	1050	2840	16

FLEXIDRUM® R 502

Halogen Free


Suitable for reeling application


Suitable for chain application

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
01050GY2041M25	4G2,5	11,7	96	240	1620	14
01050GY2051M25	5G2,5	12,5	120	260	2375	14
01050GY0071M25	7G2,5	14,3	168	350	2825	14
01050GY0121M25	12G2,5	19,1	288	650	3175	14
01050GY0181M25	18G2,5	19,3	432	700	3725	14
01050GY0241M25	24G2,5	22,6	576	950	3525	14
01050GY0301M25	30G2,5	25,7	720	1250	4525	14
01050GY0361M25	36G2,5	25,3	864	1300	4825	14
01050GY2041M40	4G4	15,5	153,6	350	1760	12
01050GY2041M60	4G6	16,7	230,4	400	1790	10
01050GY2041M61	4G10	19,8	384	650	2200	8
01050GY2041M62	4G16	22,2	614,4	850	2700	6
01050GY2041M63	4G25	28	960	1350	3200	4
01050GY2041M64	4G35	30,5	1344	1800	4200	2
01050GY2041M65	4G50	35,5	1920	2500	6000	1
01050GY2041M66	4G70	41,2	2688	3500	8400	2/0
01050GY2041M67	4G95	46,2	3648	4600	8400	3/0
01050GY2041M68	4G120	51	4608	5750	14400	4/0
01050GY2041M69	4G150	55,5	5760	7400	18000	250 MCM
01050GY2051M40	5G4	16,6	192	410	2600	12
01050GY2051M60	5G6	18,1	288	520	2900	10
01050GY2051M61	5G10	21,6	480	800	2900	8
01050GY2051M62	5G16	25	768	1100	2900	6
01050GY2051M63	5G25	30,5	1200	1780	3750	4
01050GY2051M64	5G35	34,3	1680	2350	5250	2
01050GY3030M72	3x300	66,8	8640	10850	27000	550 MCM
01050GY2037M65	3x50+3G25/3	32,3	1680	2320	4500	1
01050GY2037M66	3x70+3G35/3	36,1	2352	3180	6300	2/0
01050GY2037M67	3x95+3G50/3	41	3216	4020	8550	3/0
01050GY2037M68	3x120+3G70/3	45,8	4128	5370	10800	4/0
01050GY2037M69	3x150+3G70/3	51	4992	6440	13500	250 MCM
01050GY2037M70	3x185+3G95/3	54,6	6240	7780	16650	350 MCM
01050GY2037M71	3x240+3G120/3	66,3	7830	10800	-	450 MCM
01050GY2039900	3x25+3G16/3+2x1,5	27,4	902	1470	-	4
01050GY2039901	3x35+3G16/3+2x1,5	29,4	1190	1820	-	2
01050GY2039902	3x50+3G25/3+2x1,5	35,4	1708	2610	-	1
01050GY2039903	3x70+3G35/3+2x2,5	38,7	2400,2	3450	-	2/0
01050GY2039904	3x95+3G50/3+2x2,5	43,1	3264,2	4290	-	3/0
01050GY2039905	3x120+3G70/3+2x2,5	47	4176	5480	-	4/0
01050GY2039906	3x150+3G70/3+2x2,5	53,9	5040	6790	-	250 MCM
01050GY2039907	3x185+3G95/3+2x2,5	56,7	6287	8030	-	350 MCM
01050GY2039908	3x240+3G120/3+2x2,5	65,1	8112	10660	-	450 MCM
SECTIONS WITHOUT ANTI-TWISTING PROTECTION						
01051GY2039900	3x25+3G16/3+2x1,5	25,6	902	1390	-	4
01051GY2039901	3x35+3G16/3+2x1,5	28	1190	1740	-	2
01051GY2039902	3x50+3G25/3+2x1,5	32,4	1708	2430	-	1
01051GY2039903	3x70+3G35/3+2x2,5	36,2	2400,2	3280	-	2/0
01051GY2039904	3x95+3G50/3+2x2,5	40,7	3264,2	4080	-	3/0
01051GY2039905	3x120+3G70/3+2x2,5	45,5	4176	5310	-	4/0
01051GY2039906	3x150+3G70/3+2x2,5	50,7	5040	6410	-	250 MCM
01051GY2039907	3x185+3G95/3+2x2,5	54,8	6287	7830	-	350 MCM
01051GY2039908	3x240+3G120/3+2x2,5	61,6	8112	9930	-	450 MCM

Other dimensions and colors available on request.

FLEXIDRUM® R 503

Suitable for reeling application

Suitable for festoon application

Construction:

Conductor:	flexible red copper conductor Cl. 6, acc to IEC 60228, DIN VDE 0295
Insulation:	GAALTHERM® 585
Cores color:	*Construction in layer/s (eg 4G, 12G, 30G):* black cores with consecutive numbers acc. to EN 50334 + green-yellow *Construction 3+3 (eg 3x25+3G4):* 3 black conductors numbered + 3 green-yellow conductors divided in 3 inetstices *Construction in pairs (eg 6x(2x1)C):* black cores with consecutive numbers acc. to EN 50334
Central unit:	core element (if necessary)
Stranding:	*Construction in layer/s (eg 4G, 12G, 30G):* in layers wih special yarns between cores + plastic tape between layers *Construction 3+3 (eg 3x25+3G4):* phase units laid up with earth-conductors in interstices, with special yarns between phases + fillers (if necessary) *Construction in pairs (eg 6x(2x1)C):* cores twisted in pairs + plastic foil / tinned copper braid / plastic foil / GAALTHERM® 585 sheath, pairs in layers around central unit + filler (if necessary)
Wrapping:	non-woven tape or plastic tape
Inner sheath:	PUR compound
Supporting screen:	anti-twisting protection of textile braid
Outer sheath:	black (similar to RAL 9005), PUR compound

Technical data:

Nominal voltage:	Uo/U 0,6/1 kV
Nominal voltage UL:	1000 V
Test voltage:	4 kV
Temperature range DIN VDE:	
Fixed laying:	-50°C up to +90°C
Flexible installation:	-40°C up to +90°C
Temperature range UL:	
Fixed laying:	up to +80°C
Flexible installation:	up to +80°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Min. bending radius:	
Fixed laying:	5 x d
Flexible laying:	7,5 x d
Tensile strenght:	
Static	50 N/mm²
Dynamic:	20 N/mm²
Max. torsion:	± 25°/1mt.
Max speed (main application):	180 m/min

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2
UL-VW-1, CSA FT-1

Halogen-free acc. to:
DIN VDE 0482 part 267,
EN 50267-2-1,
IEC 60754-1

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Features:

UV resistance: very good

chemical rsistance: good

small outer diameter

reduced cable weight

high winding and unwinding strength

c UL us AWM style 10492/21223 80° 600, 1000 V
AWM II A/B 80°C 1000 V FT1

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS and CE approval

Applications:

FLEXIDRUM® R 503
is used on heavy appliances like motor cable reel hoists, transport systems, movable motors and farm vehicles with high mechanical stress

FLEXIDRUM® R 503

Suitable for reeling application

Suitable for festoon application

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
01120G70041A16	4G1,5	9,4	57,6	135	2000	16
01120G70051A16	5G1,5	10,1	72	160	2000	16
01120G70071A16	7G1,5	11,1	101	210	2500	16
01120G70121A16	12G1,5	13,6	172,8	310	3000	16
01120G70181A16	18G1,5	15,7	259,2	420	3500	16
01120G70241A16	24G1,5	18,8	345	560	4000	16
01120G70041A14	4G2,5	11	96	195	2500	14
01120G70051A14	5G2,5	12	120	235	2500	14
01120G70071A14	7G2,5	13,8	168	305	3000	14
01120G70121A14	12G2,5	17	288	460	3500	14
01120G70181A14	18G2,5	20	432	695	4000	14
01120G70241A14	24G2,5	23,2	576	925	4500	14
01120G70301A14	30G2,5	23,7	720	1250	5000	14
01120G70361A14	36G2,5	27,8	864	1410	5700	14
01120G70041A12	4G4	12,5	153,6	275	2500	12
01120G70041A10	4G6	14,9	230,4	390	3000	10
01120G70041A08	4G10	18	384	570	4000	8
01120G70041A06	4G16	21,5	614,4	915	4500	6
01120G70041A04	4G25	25,5	960	1360	5500	4
01120G70041A02	4G35	29,2	1344	1865	7000	2
01120G70041A01	4G50	34,5	1920	2650	9000	1
01120G70051A12	5G4	14,3	192	365	-	12
01120G70051A08	5G10	19,6	480	730	4000	8
01120G70051A06	5G16	23,6	768	1110	5500	6
01120G70051A04	5G25	28,3	1200	1685	6000	4
01120G70037A04	3x25+3G4	23,2	835	1105	5000	4
01120G70037A02	3x35+3G6	26,5	1180	1525	6000	2
01120G70037A01	3x50+3G10	31	1728	2155	7000	1
01120G70037A2C	3x70+3G16	36,4	2477	3100	8000	2/0
01121G70062A18	6x(2x1)C	20,1	204	455	2500	18

Other dimensions and colors available on request.

FLEXIDRUM® R 700

Suitable for reeling application

Suitable for chain application

Construction:

Conductor:	flexible red copper conductor Cl. 6, acc to IEC 60228, DIN VDE 0295
Insulation:	GAALTHERM® 585
Cores color:	acc. to DIN VDE 0293-308, HD 308 S2 from 6 cores black cores with consecutive numbers acc. to EN 50334; green-yellow earth-wire from 3 cores
Central unit:	textile element
Stranding:	in layers around central unit
Wrapping:	non-woven tape over each layer
Inner sheath:	special PUR compound
Supporting screen:	anti-twisting protection of high-tech yarns
Outer sheath:	yellow (similar to RAL 1021), special PUR compound

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Halogen-free acc. to:
DIN VDE 0482 part 267,
EN 50267-2-1,
IEC 60754-1

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Technical data:

Nominal voltage:	Uo/U 0,6/1 kV
Test voltage:	2,5 kV
Temperature range:	
Fixed laying:	-40°C up to +90°C
Flexible installation:	-30°C up to +90°C
Min. bending radius:	acc. to DIN VDE 0298 part 3
Insulation resistance:	> 20 MOhm x km
Tensile strenght:	2000 N (up to 4000 N on request)
Max speed (main application):	250 m/min

Features:

for spreader application!

vertical use

small outer diameter

reduced cable weight

for SPEED and MINIMUM BENDING RADIUS see pages from 2 to 8 of catalogue

RoHS and CE approval

Applications:

FLEXIDRUM® R 700
is used on heavy appliances like motor cable reel hoists, transport systems, movable motors and farm vehicles with high mechanical stress

FOR SPREADER APLICATION:

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
01060GYA181M25	18G2,5	21,5	432	815	2000	14
01060GYA371M25	37G2,5	31	888	1550	4000	14
01060GYA441M25	44G2,5	34	1056	1800	4000	14
01060GYA561M25	56G2,5	-	1344	-	-	14

Other dimensions and colors available on request.

FLEXIDRUM® R 701 UL

Construction:

Conductor:	flexible red copper conductor Cl. 6, acc to IEC 60228, DIN VDE 0295 (from 1,5 to 35 mm²) Flexible red copper conductor Cl. 5, acc to IEC 60228, DIN VDE 0295 (from 50 mm²)
Insulation:	GAALTHERM® 585
Cores color:	acc. to DIN VDE 0293-308, HD 308 S2 from 6 cores white cores with consecutive numbers acc. to EN 50334; green-yellow earth-wire from 3 cores
Central unit:	textile element
Stranding:	in layers around central unit
Wrapping:	non-woven tape over each layer
Inner sheath:	special PUR compound
Supporting screen:	anti-twisting protection of high-tech yarns
Outer sheath:	yellow (similar to RAL 1021) or black (similar to RAL 9005), special PUR compound

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Halogen-free acc. to:
DIN VDE 0482 part 267,
EN 50267-2-1,
IEC 60754-1

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Technical data:

Nominal voltage DIN VDE:	Uo/U 0,6/1 kV
Nominal voltage UL/CSA:	1000 V
Test voltage:	4 kV
Temperature range:	
Fixed laying:	-50°C up to +90°C
Flexible installation:	-40°C up to +90°C
Min. bending radius:	acc. to DIN VDE 0298 part 3
Insulation resistance:	> 20 MOhm x km
Tensile strenght:	25 N per mm² (standard type) 35 N per mm² (reinforced type)
Max speed (main application):	250 m/min

Features:

vertical use

small outer diameter

reduced cable weight

AWM style 10264/20235 80° 1000 V
CSA AWM II A/B 90°C 600 V FT1

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS and CE approval

FLEXIDRUM® R 701 UL

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
01070HY2041A16	4G1,5	10,5	57,6	165	150	16
01070HY2051A16	5G1,5	11	72	185	190	16
01070HYA071A16	7G1,5	13	100,8	255	265	16
01070HYA121A16	12G1,5	18,5	172,8	345	450	16
01070HYA181A16	18G1,5	18,8	259,2	540	675	16
01070HYA241A16	24G1,5	21,5	345,6	670	900	16
01070HYA301A16	30G1,5	24,8	432	910	1125	16
01070HYA361A16	36G1,5	25,7	518,4	945	1350	16
01070HYA421A16	42G1,5	26,7	604,8	1070	1575	16
01070HYA511A16	51G1,5	31,3	734,4	1530	1920	16
01070HY2041A14	4G2,5	12	96	220	250	14
01070HY2051A14	5G2,5	13	120	280	315	14
01070HYA071A14	7G2,5	15	168	340	440	14
01070HYA121A14	12G2,5	20,5	288	550	750	14
01070HYA181A14	18G2,5	21,3	432	740	1125	14
01070HYA241A14	24G2,5	25,1	576	995	1500	14
01070HYA301A14	30G2,5	27,9	720	1260	1875	14
01070HYA361A14	36G2,5	28,5	864	1335	2250	14
01070HYA421A14	42G2,5	31,5	1008	1525	2625	14
01070HYA501A14	50G2,5	34,9	1200	2150	3125	14
01070HYA511A14	51G2,5	35,5	1224	2200	3190	14
01070HY2041A12	4G4	12,8	153,6	280	400	12
01070HY2051A12	5G4	14,5	192	370	500	12
01070HY2041A10	4G6	17,2	230,4	420	600	10
01070HY2051A10	5G6	18	288	520	750	10
01070HY0071A10	7G6	21,2	403,2	730	1050	10
01070HY2041A08	4G10	19,9	384	645	1000	8
01070HY2051A08	5G10	21,2	480	780	1250	8
01070HYA071A08	7G10	26	672	1060	1750	8
01070HY2041A06	4G16	24	614,4	950	1600	6
01070HY2051A06	5G16	26	768	1180	2000	6
01070HY2041A04	4G25	28	960	1500	2500	4
01070HY2041A02	4G35	30,4	1344	2130	3500	2
01070HY2041A1C	4G50	35,5	1920	2620	5000	1
01070HY2041A2C	4G70	40,5	2688	3715	7000	2/0
01070HY2041A3C	4G95	50,9	3648	4810	9500	3/0
01070HY2041A4C	4G120	53,2	4608	5915	12000	4/0
01070HYA041A5C	4G150	56,3	5760	7120	15000	250 MCM
01070HY2037A1C	3G50+3x10	35	1728	2620	3750	1
01070HY2048A06	4G16+4x2,5	24	710,4	1060	2050	6
01070HY2169900	4G16+2x(4x1,5)C	29,5	925	1525	1600	6

REINFORCED TYPE:

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
01071HYA241A16	24G1,5	23,5	345,6	690	1260	16
01071HYA301A16	30G1,5	27,7	432	935	1575	16
01071HYA361A16	36G1,5	29,3	518,4	970	1890	16
01071HYA421A16	42G1,5	29,8	604,8	1200	2200	16
01071HYA491A16	49G1,5	32,9	705,6	1520	2580	16
01071HYA241A14	24G2,5	26,7	576	1015	2100	14
01071HYA301A14	30G2,5	29,1	720	1310	2625	14
01071HYA361A14	36G2,5	32,5	864	1425	3150	14
01071HYA421A14	42G2,5	33,8	1008	1650	3675	14
01071HYA491A14	49G2,5	38,3	1176	1700	4280	14

Other dimensions and colors available on request.

FLEXIDRUM® R 702

Halogen Free

Suitable for reeling application

Suitable for chain application

Construction:

Conductor:	flexible red copper conductor Cl. 5, acc to IEC 60228, DIN VDE 0295
Insulation:	GAALTHERM® 585
Cores color:	acc. to DIN VDE 0293-308, HD 308 S2 from 6 cores black cores with consecutive numbers acc. to EN 50334; green-yellow earth-wire from 3 cores
Central unit:	special yarns
Central unit insulation:	black (similar to RAL 9005), GAALTHERM® 585
Stranding:	in layers around central unit
Wrapping:	non-woven tape over each layer
Inner sheath:	PUR compound
Supporting screen:	anti-twisting protection of high-tech yarns
Outer sheath:	black (similar to RAL 9005) or yellow (similar to RAL 1021, PUR compoun

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Halogen-free acc. to:
DIN VDE 0482 part 267,
EN 50267-2-1,
IEC 60754-1

Oil resistance acc. to:
DIN VDE 0282 part 10
IEC EN 60811-2-1

Technical data:

Nominal voltage:	Uo/U 0,6/1 kV
Test voltage:	4 kV
Temperature range:	
Fixed laying:	-50°C up to +90°C
Flexible installation:	-40°C up to +90°C
Min. bending radius:	
Fixed laying:	≤12 mm 3 x d / >12 mm 4 x d
For repeated winding action(felxible):	6 x D
Guided on deflection pulleys (felxible):	7,5 x D
Max speed (main application):	120 m/min

Features:

New version! reduced weight and diameter

UV resistance: very good

chemical rsistance: good

small outer diameter

reduced cable weight

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS and CE approval

RoHS CE

Applications:

FLEXIDRUM® R 702
is used on heavy appliances, cable reels, for vertical use

FLEXIDRUM® R 702

Halogen Free


Suitable for reeling application


Suitable for chain application

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
01080GY0491M10	49G1	25	470,4	880	3500	19
01080GY2041M15	4G1,5	9,1	57,6	111	1340	16
01080GY2051M15	5G1,5	9,9	72	133	1690	16
01080GY0071M15	7G1,5	11,9	100,8	193	2150	16
01080GY0121M15	12G1,5	16,7	172,8	341	2600	16
01080GY0181M15	18G1,5	16,5	259,2	411	2600	16
01080GY0251M15	25G1,5	21,3	360	620	-	16
01080GY0361M15	36G1,5	22,6	518,4	812	3500	16
01080GY2041M25	4G2,5	10,5	96	163	1345	14
01080GY2051M25	5G2,5	11,7	120	200	2100	14
01080GY0071M25	7G2,5	13,9	168	295	2500	14
01080GY0081M25	8G2,5	14,9	192	360	2800	14
01080GY0121M25	12G2,5	19,6	288	506	2900	14
01080GY0181M25	18G2,5	19,7	432	611	3450	14
01080GY0201M25	20G2,5	22	480	703	3000	14
01080GY0241M25	24G2,5	23,9	576	843	2700	14
01080GY0301M25	30G2,5	26,7	720	1057	4200	14
01080GY0361M25	36G2,5	26,8	864	1164	5000	14
01080GY0421M25	42G2,5	28,7	1008	1405	5750	14
01080GY0501M25	50G2,5	32,5	1200	1688	6750	14
01080GY0561M25	56G2,5	33,7	1344	1783	7900	14
01080GY2041M40	4G4	12,5	153,6	240	1690	12
01080GY0071M40	7G4	16,6	268,8	425	2600	12
01080GY0141M40	14G4	22,5	537,6	790	-	12
01080GY0161M40	16G4	23,9	614,4	880	3500	12
01080GY2041M60	4G6	14,6	230,4	344	1860	10
01080GY2041M61	4G10	18,1	384	574	2300	8
01080GY2041M62	4G16	22,4	614,4	873	2800	6
01080GY2048M62	4G16+4x2,5	23,6	670	1100	2050	6
01080GY2048M63	4x25+4G2,5	26,9	1056	1403	-	4
01080GY2037M63	3x25+3G6	24,3	892,8	1181	3300	4
01080GY2041M63	4G25	26,6	960	1341	3300	4
01080GY2037M64	3x35+3G6	28,1	1180,8	1569	3300	2
01080GY2041M64	4G35	31,2	1344	1880	3300	2
01080GY2037M65	3x50+3G10	31,9	1728	2219	3800	1
01080GY2041M65	4G50	35,4	1920	2592	4000	1

Other dimensions and colors available on request.

FLEXIDRUM® SPECIAL R 702

Suitable for reeling application

Suitable for chain application

Construction:

Conductor:	flexible red copper conductor Cl. 5, acc to IEC 60228, DIN VDE 0295
Insulation:	GAALTHERM® 585
Cores color:	acc. to DIN VDE 0293-308, HD 308 S2 from 6 cores black cores with consecutive numbers acc. to EN 50334; green-yellow earth-wire from 3 cores or black cores with consecutive numbers acc. to EN 50334; green-yellow earth-wire from 3 cores also under 6 cores
Central unit:	special yarns
Central unit insulation:	black (similar to RAL 9005), GAALTHERM® 585
Stranding:	in layers around central unit
Wrapping:	non-woven tape over each layer
Inner sheath:	PUR compound
Supporting screen:	anti-twisting protection of high-tech yarns
Outer sheath:	black (similar to RAL 9005) or yellow (similar to RAL 1021, PUR compoun

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Halogen-free acc. to:
DIN VDE 0482 part 267,
EN 50267-2-1,
IEC 60754-1

Oil resistance acc. to:
DIN VDE 0282 part 10
IEC EN 60811-2-1

Technical data:

Nominal voltage:	Uo/U 0,6/1 kV or Uo/U 300/500 V
Test voltage:	
Uo/U 0,6/1 kV:	4 kV
Uo/U 300/500 V:	2 kV
Temperature range:	
Fixed laying:	-50°C up to +90°C
Flexible installation:	-40°C up to +90°C
Min. bending radius:	
Fixed laying:	≤12 mm 3 x d / >12 mm 4 x d
For repeated winding action(felxible):	6 x D
Guided on deflection pulleys (felxible):	7,5 x D
Max speed (main application):	120 m/min

Features:

New version! reduced weight and diameter

UV resistance: very good

chemical rsistance: good

small outer diameter

reduced cable weight

available:
supporting screen in fiber glass braid
identified with "5" on the 5th number of the Part. no

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS and CE approval

Applications:

FLEXIDRUM® SPECIAL R 702
is used on heavy appliances, cable reels, for vertical use

FLEXIDRUM® SPECIAL R 702

Halogen Free

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
01080GY2049900	4G16+4x2x1,5	28,2	729,6	1030	-	6/16
01080GY2049901	4G35+25x1,5	37,4	1704	2287	-	2/16
01080GY2049902	4G50+3x2x1	35,3	2069	2700	-	1/14
01080G72049903	4G50+7x2,5	39,2	2088	2786	5000	1
01080GY0449904	44G4	36,8	1689,6	2330	6200	12
01080GY0429905	42G4+3x1G62,5/125µm	37,9	1612,8	2251	5000	1214/24
01080GY0189906	18G2,5+(4x2x0,14)PN	26,7	650	903	-	14/26
01080GY0309907	30G2,5+(8x2,5)C	31,5	980	1450	-	14/14
01080GY2049908	4G16+12x1,5+(4x1,5)C	36,5	868,5	1480	-	6/16/16
01080GY2049909	4G35+(3x2,5)ST+(2x1,5)ST(2x1)C	48	1486,5	3070	-	2/14/16/19
01080GY0169910	16G1,5+2x(1x1,5)C	19,1	280	530	-	16/16
01080GY3039911	3x35+1x16+(2x2,5)C	34,1	1231,1	1957	-	2/6/14
01080GY3039912	3x35+1x16+3x2,5	33,9	1233,6	1955	-	2/6/14
01080GY2059913	(4x2x0,14)S GE+9G4+5G6	34,8	674,2	1397	-	26/12/10
01080GY2059914	(2x2x0,34) PN+7G4+5G6	26,6	591,3	995	-	22/12/10
01080GY2049915	4G4+4x1,5+4x(1,5)C	21,6	310,3	609	-	12/16/16
01080GY3039916	3x35+2x10+12x1,5+(4x1,5)	41	1454,1	2323	-	2/8/16/16
01080GY3039917	3x50+(3G10)C	33	1924,4	2408	-	1/8
01080GY2049918	4G16+2x(4x1,5)C	25,6	840	1184	-	4/16
01080GY0089919	8G2,5+(4x2,5)C	21,9	310,8	632	-	14/14
01080GY0709920	70G4	45,4	2668	3586	-	12
01080GY1049921	4x2x0,14	10,7	40,6	120	-	26
01080GY2039922	3G2,5+40x0,5+20x1,5	-	-	-	-	14/18/16
01080G70359923	(35G2,5)C+18x2,5	35,3	1433	1868	-	14/14
01080G70049924	4G10+2x2,5+2x(2x0,75)C+3x3x0,75	32,4	557,4	1230	-	8/14/19/19
01080GY1049925	3x2x0,75	9,9	70,2	-	-	19
01080G72049926	4G25+17x2,5	-	1368	-	-	4/14
01080G72049927	4x1,5+2x(2x0,75)C+(4x0,14+4x0,34)C	18,9	149,1	418	-	16/19/26/24
01080G72049928	4G4+2x2,5+2x(2x0,34)	19,1	285	540	-	12/14/22
01080G70309929	30G4+(6x2,5)C	42	1350	2367	25000	4/14
01080D70049930	4G25+4x2x2,5	30	1152	1502	4000	4/14
01080G70242931	24g2,5+2x4g50/125	27,7	576	1017	-	14
01080G70259932	25G2,5+5x(1,5)C	27,2	682,4	1094	-	14/16
01080G70268M25	(4x2,5)C+26g2,5	25,6	791,4	1053,2	-	14/14
01080G72059933	5G35+7x1,5	38	1780,8	2504	-	2/16
01080G70249934	24G2,5+6x(2x1)C	33	787	1425	-	14/18
01085GY0181M40	18G4	24	691,2	-	-	12
01080G7025BM60	25G6+2x(2x1)C	40,1	1510,3	2335	2500	10/18
01080D70089935	8G10+(2x2x1)C+2x3x1,5+2x6	34,3	1024,1	1786	-	8/18/16/10
01080GY037BM25	37G2,5+(2x0,34)CB	30	913,4	1346	5000	14/24
01080G72059936	5G35+7x2,5	38,5	1848	2585	-	2/14

Other dimensions and colors available on request.

FLEXIDRUM® R 703

Suitable for reeling application

Suitable for chain application

Construction:

Conductor:	flexible red copper conductor Cl. 5, acc to IEC 60228, DIN VDE 0295
Insulation:	GAALTHERM® 585
Cores color:	acc. to DIN VDE 0293-308, HD 308 S2 from 6 cores black cores with consecutive numbers acc. to EN 50334; green-yellow earth-wire from 3 cores
Central unit:	aramide yarns
Central unit insulation:	black (similar to RAL 9005), GAALTHERM® 540
Stranding:	in layers around central unit
Wrapping:	non-woven tape over each layer
Inner sheath:	black (similar to RAL 9005), PUR compound
Supporting screen:	anti-twisting protection of high-tech yarns
Outer sheath:	black (similar to RAL 9005) special PUR compound

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Halogen-free acc. to:
DIN VDE 0482 part 267,
EN 50267-2-1,
IEC 60754-1

Oil resistance acc. to:
DIN VDE 0282 part 10
IEC EN 60811-2-1

Technical data:

Nominal voltage:	Uo/U 0,6/1 kV
Test voltage:	3,5 kV
Temperature range:	
Fixed laying:	-50°C up to +120°C
Flexible installation:	-40°C up to +120°C
Min. bending radius:	
Fixed laying:	4 x d
For repeated winding action(felxible):	6 x D
Guided on deflection pulleys (felxible):	7,5 x D
Max speed (main application):	120 m/min

Features:

max. temperature up to +120°C!

UV resistance: very good

chemical rsistance: good

small outer diameter

reduced cable weight

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS and CE approval

Applications:

FLEXIDRUM® SPECIAL R 703
is used on heavy appliances, cable reels, for vertical use
up to +120°C

FLEXIDRUM® R 703


Suitable for reeling application


Suitable for chain application

Part no	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
01100G70491M10	49G1	25	470,4	880	3500	19
01100G72041M15	4G1,5	9,1	57,6	111	1340	16
01100G72051M15	5G1,5	9,9	72	133	1690	16
01100G70071M15	7G1,5	11,9	100,8	193	2150	16
01100G70121M15	12G1,5	16,7	172,8	341	2600	16
01100G70181M15	18G1,5	16,5	259,2	411	2600	16
01100G72041M25	4G2,5	10,5	96	163	1345	14
01100G72051M25	5G2,5	11,7	120	200	2100	14
01100G70071M25	7G2,5	13,9	168	295	2500	14
01100G70081M25	8G2,5	14,9	192	360	2800	14
01100G70121M25	12G2,5	19,7	288	506	2900	14
01100G70181M25	18G2,5	19,6	432	611	3450	14
01100G70241M25	24G2,5	23,9	576	843	2700	14
01100G70301M25	30G2,5	26,7	720	1057	4200	14
01100G70361M25	36G2,5	26,8	864	1164	5000	14
01100G70421M25	42G2,5	28,7	1008	1405	5750	14
01100G70501M25	50G2,5	32,5	1200	1688	6750	14
01100G70561M25	56G2,5	33,7	1344	1783	7900	14
01100G72041M40	4G4	12,5	153,6	240	1690	12
01100G70071M40	7G4	16,6	268,8	425	2600	12
01100G70161M40	16G4	23,9	614,4	880	3500	12
01100G72041M60	4G6	14,6	230,4	344	1860	10
01100G72041M61	4G10	18,1	384	574	2300	8
01100G72041M62	4G16	22,4	614,4	873	2800	6
01100G72048M62	4G16+4x2,5	23,6	670	1100	2050	6
01100G72037M63	3x25+3G6	24,3	892,8	1181	3300	4
01100G72041M63	4G25	26,6	960	1341	3300	4
01100G72051M63	5G25	30,1	1200	1696	3500	4
01100G72037M64	3x35+3G6	28,1	1180,8	1569	3300	2
01100G72041M64	4G35	31,2	1344	1880	3300	2
01100G72037M65	3x50+3G10	31,9	1728	2219	3800	1
01100G72041M65	4G50	35,4	1920	2592	4000	1

Other dimensions and colors available on request.

FLEXIDRUM® MEDIUM R 902

Suitable for reeling application

Construction:

Conductor:	flexible red copper conductor Cl. 5, acc to IEC 60228, DIN VDE 0295
Inner semi-conductive layer:	semi-conducting compound
Insulation:	rubber EPR special compound
Outer semi-conductive layer:	semi-conducting compound
Cores color:	**Power:** natural color with black semi-conducting compound **Earth:** black semi-contucting compound
Inner sheath:	PUR compound
Supporting screen:	anti-twisting protection of high-tech yarns
Outer sheath:	red (similar to RAL 3000) special PUR compound

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Technical data:

Nominal voltage:	U/oU 3,6/6 kV up to 12/20 kV
Temperature range	
Fixed laying:	-40°C up to +80°C
Flexible installation:	-25°C up to +80°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Min. bending radius:	acc. to DIN VDE 0298 part 3
Tensile strenght:	25 N per mm²
Max speed (main application):	120 m/min

Features:

mining excavator!

outdoor use

UV, ozone, moisture resistant

oil resistance: very good

small outer diameter

reduced cable weight

Possible without anti-twisting reinforcement

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS approval

RoHS

FLEXIDRUM® MEDIUM R 902


Suitable for reeling application

3,6/6 kV (7,2) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02010MR1037M63	3x25+3x25/3	35	960	1900	2500	4
02010MR1037M64	3x35+3x25/3	39,5	1248	2300	3250	2
02010MR1037M65	3x50+3x25/3	42,5	1680	2860	4375	0
02010MR1037M66	3x70+3x35/3	46,5	2352	3800	6125	2/0
02010MR1037M67	3x95+3x50/3	51,2	3216	4700	8375	3/0
02010MR1037M68	3x120+3x70/3	55,7	4128	5900	10750	4/0
02010MR1037M69	3x150+3x70/3	59,5	4992	6950	13000	250 MCM
02010MR1037M70	3x185+3x95/3	-	6240	-	16250	350 MCM
02010MR1037M71	3x240+3x120/3	-	8064	-	21000	450 MCM
02010MR1037M72	3x300+3x150/3	-	10080	-	26250	600 MCM

6/10 kV (12) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02010QR1037M63	3x25+3x25/3	35	960	1900	2500	4
02010QR1037M64	3x35+3x25/3	39,5	1248	2300	3250	2
02010QR1037M65	3x50+3x25/3	42,5	1680	2860	4375	0
02010QR1037M66	3x70+3x35/3	46,5	2352	3800	6125	2/0
02010QR1037M67	3x95+3x50/3	51,2	3216	4700	8375	3/0
02010QR1037M68	3x120+3x70/3	55,7	4128	5900	10750	4/0
02010QR1037M69	3x150+3x70/3	59,5	4992	6950	13000	250 MCM
02010QR1037M70	3x185+3x95/3	-	6240	-	16250	350 MCM
02010QR1037M71	3x240+3x120/3	-	8064	-	21000	450 MCM
02010QR1037M72	3x300+3x150/3	-	10080	-	26250	600 MCM

8,7/15 kV (7,2) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02010SR1037M63	3x25+3x25/3	35	960	1900	2500	4
02010SR1037M64	3x35+3x25/3	39,5	1248	2300	3250	2
02010SR1037M65	3x50+3x25/3	42,5	1680	2860	4375	0
02010SR1037M66	3x70+3x35/3	46,5	2352	3800	6125	2/0
02010SR1037M67	3x95+3x50/3	51,2	3216	4700	8375	3/0
02010SR1037M68	3x120+3x70/3	55,7	4128	5900	10750	4/0
02010SR1037M69	3x150+3x70/3	59,5	4992	6950	13000	250 MCM
02010SR1037M70	3x185+3x95/3	-	6240	-	16250	350 MCM
02010SR1037M71	3x240+3x120/3	-	8064	-	21000	450 MCM
02010SR1037M72	3x300+3x150/3	-	10080	-	26250	600 MCM

12/20 kV (24) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02010UR1037M63	3x25+3x25/3	45,5	960	2650	2500	4
02010UR1037M64	3x35+3x25/3	46	1248	2900	3250	2
02010UR1037M65	3x50+3x25/3	47,2	1680	3300	4375	0
02010UR1037M66	3x70+3x35/3	51,5	2352	4300	6125	2/0
02010UR1037M67	3x95+3x50/3	54,7	3216	5100	8375	3/0

Other dimensions and colors available on request.

FLEXIDRUM® MEDIUM R 902 OPTICAL FIBER

Suitable for reeling application

Construction:

Conductor:	flexible red copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Inner semi-conductive layer:	semi-conducting compound
Insulation:	rubber EPR special compound
Outer semi-conductive layer:	semi-conducting compound
Cores color:	**Power:** natural color with black semi-conducting compound **Earth:** black semi-contucting compound
Optical fibres element:	6 fiber optics, multimode 62.5/125 µm
Inner sheath:	PUR compound
Supporting screen:	anti-twisting protection of high-tech yarns
Outer sheath:	red (similar to RAL 3000) special PUR compound

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Technical data:

Nominal voltage:	U/oU 3,6/6 kV up to 12/20 kV
Temperature range:	
Fixed laying:	-40°C up to +80°C
Flexible installation:	-25°C up to +80°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Min. bending radius:	acc. to DIN VDE 0298 part 3
Tensile strenght:	25 N per mm^2
Max speed (main application):	120 m/min

Features:

mining excavator!

outdoor use

UV, ozone, moisture resistant

oil resistance: very good

small outer diameter

reduced cable weight

possible without anti-twisting reinforcement

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS approval

RoHS

FLEXIDRUM® MEDIUM R 902 OPTICAL FIBER


Suitable for reeling application

3,6/6 kV (7,2) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02020MR1037M63	3x25+2x25/2+FO	35	960	1900	2500	4
02020MR1037M64	3x35+2x25/2+ FO	39,5	1248	2300	3250	2
02020MR1037M65	3x50+2x25/2+FO	42,5	1680	2860	4375	0
02020MR1037M66	3x70+2x35/2+FO	46,5	2352	3800	6125	2/0
02020MR1037M67	3x95+2x50/2+FO	51,2	3216	4700	8375	3/0
02020MR1037M68	3x120+2x70/2+FO	55,7	4128	5900	10750	4/0
02020MR1037M69	3x150+2x70/2+FO	59,5	4992	6950	13000	250 MCM
02020MR1037M70	3x185+2x95/2+FO	-	6240	-	16250	350 MCM
02020MR1037M71	3x240+2x120/2+FO	-	8064	-	21000	450 MCM
02020MR1037M72	3x300+2x150/2+FO	-	10080	-	26250	600 MCM

6/10 kV (12) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02020QR1037M63	3x25+2x25/2+FO	35	960	1900	2500	4
02020QR1037M64	3x35+2x25/2+FO	39,5	1248	2300	3250	2
02020QR1037M65	3x50+2x25/2+FO	42,5	1680	2860	4375	0
02020QR1037M66	3x70+2x35/2+FO	46,5	2352	3800	6125	2/0
02020QR1037M67	3x95+2x50/2+FO	51,2	3216	4700	8375	3/0
02020QR1037M68	3x120+2x70/2+FO	55,7	4128	5900	10750	4/0
02020QR1037M69	3x150+2x70/2+FO	59,5	4992	6950	13000	250 MCM
02020QR1037M70	3x185+2x95/2+FO	-	6240	-	16250	350 MCM
02020QR1037M71	3x240+2x120/2+FO	-	8064	-	21000	450 MCM
02020QR1037M72	3x300+2x150/2+FO	-	10080	-	26250	600 MCM

8,7/15 kV (18) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02020SR1037M63	3x25+2x25/2+FO	35	960	1900	2500	4
02020SR1037M64	3x35+2x25/2+FO	39,5	1248	2300	3250	2
02020SR1037M65	3x50+2x25/2+FO	42,5	1680	2860	4375	0
02020SR1037M66	3x70+2x35/2+FO	46,5	2352	3800	6125	2/0
02020SR1037M67	3x95+2x50/2+FO	51,2	3216	4700	8375	3/0
02020SR1037M68	3x120+2x70/2+FO	55,7	4128	5900	10750	4/0
02020SR1037M69	3x150+2x70/2+FO	59,5	4992	6950	13000	250 MCM
02020SR1037M70	3x185+2x95/2+FO	-	6240	-	16250	350 MCM
02020SR1037M71	3x240+2x120/2+FO	-	8064	-	21000	450 MCM
02020SR1037M72	3x300+2x150/2+FO	-	10080	-	26250	600 MCM

12/20 kV (24) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02020UR1037M63	3x25+2x25/2+FO	45,5	960	2650	2500	4
02020UR1037M64	3x35+2x25/2+FO	46	1248	2900	3250	2
02020UR1037M65	3x50+2x25/2+FO	47,2	1680	3300	4375	0
02020UR1037M66	3x70+2x35/2+FO	51,5	2352	4300	6125	2/0
02020UR1037M67	3x95+2x50/2+FO	54,7	3216	5100	8375	3/0

Other dimensions and colors available on request.

FLEXIDRUM® MEDIUM R 901

From 8,7/15 Kv up to 12/20 Kv


Suitable for reeling application


Suitable for festoon application

Construction:

Conductor:	flexible red copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Inner semi-conductive layer:	semi-conducting compound
Insulation:	rubber EPR special compound
Outer semi-conductive layer:	semi-conducting compound
Core color:	natural color with black semi-conducting compound
Screen:	red copper braid
Outer sheath:	red (similar to RAL 3000) special PUR compound

Technical data:

Nominal voltage:	U/oU 8,7/15 kV up to 12/20 kV
Temperature range:	
Fixed laying:	-50°C up to +80°C
Flexible installation:	-30°C up to +80°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Tensile strenght:	≤ 20 N mm²
Max speed (main application):	60 m/min.

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Features:

tunneling machines!

on request other voltages

outdoor use

UV, ozone and water resistant

oil resistant

small outer diameter

reduced cable weight

possible without anti-twisting reinforcement

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS approval

Applications:

FLEXIDRUM® MEDIUM R 901
is used in reel, festoon and flexible/ fixed applications

8,7/15 kV (18) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02030SRL010M63	1x25	18,5	550	500	4
02030SRL010M64	1x35	20	680	700	2
02030SRL010M65	1x50	21	880	1000	1
02030SRL010M66	1x70	23,3	1170	1400	2/0
02030SRL010M67	1x95	25,3	1500	1900	3/0
02030SRL010M68	1x120	27,3	1840	2400	4/0
02030SRL010M69	1x150	29,25	2230	3000	250 MCM

12/20 kV (24) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02030URL010M63	1x25	22	550	500	4
02030URL010M64	1x35	22,5	680	700	2
02030URL010M65	1x50	23	880	1000	1
02030URL010M66	1x70	25,5	1170	1400	2/0
02030URL010M67	1x95	27	1500	1900	3/0
02030URL010M68	1x120	28,75	1840	2400	4/0
02030URL010M69	1x150	30,25	2230	3000	250 MCM

Other dimensions and colors available on request.

FLEXIDRUM® MEDIUM (N)TSCGEWÖU

From 3,6/6 Kv up to 20/35 Kv with antitwisting protection


Suitable for reeling application


Suitable for festoon application

Construction:

Conductor:	flexible tinned copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Inner semi-conductive layer:	semi-conducting compound
Insulation:	rubber EPR type 3GI3
Outer semi-conductive layer:	
Earth Conductor:	flexible tinned copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Earth semi-conductive layer:	semi-conducting compound
Cores color:	**Power:** natural color with black semi-conducting compound **Earth:** black semi-contucting compound
Stranding:	phase units laid up with earth-conductors in interstices
Inner sheath:	rubber PCP type 5GM3
Supporting screen:	anti-twisting protection of synthetic yarns
Outer sheath:	red (similar to RAL 3000) rubber PCP type 5GM5

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Technical data:

Nominal voltage:	U/oU 3,6/6 kV, U/oU 6/10 kV U/oU 8,7/15, U/oU 12/20 kV 20/35 kV
Max. operating voltage:	U/oU 3,6/6 kV = 7,2 kV U/oU 6/10 kV = 12 kV U/oU 8,7/15 = 18 kV U/oU 12/20 kV = 24 kV U/oU 20/35 kV = 42 kV
Test voltage:	U/oU 3,6/6 kV = 11 kV U/oU 6/10 kV = 17 kV U/oU 8,7/15 = 24 kV U/oU 12/20 kV = 29 kV U/oU 20/35 kV = 50 kV
Temperature range:	
Fixed laying:	-40°C up to +80°C
Flexible installation:	-30°C up to +60°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Min. bending radius:	
Fixed laying:	6 x d
On drums:	12 x D
On deflection pulley:	15 x D
Free movement:	12 x D
Min. distance for change of direction:	20 x D
Max speed (main application):	180 m/min
Max torsion:	± 25°/m

Features:

new version reduced weight and diameter!

on request cold version up to - 45°C

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS approval

RoHS

Applications:

power supply to mobile units with high risk of mechanical damage. It is designed to work with forced guidance systems with defection on different floors and equipment with reel axis in direction of travel

FLEXIDRUM® MEDIUM (N)TSCGEWÖU

From 3,6/6 Kv up to 20/35 Kv with antitwisting protection


Suitable for reeling application


Suitable for festoon application

3,6/6 kV (7,2) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02040MR1037M63	3x25+3x25/3	40	960	2450	1500	4
02040MR1037M64	3x35+3x25/3	42,7	1248	2960	2100	2
02040MR1037M65	3x50+3x25/3	45,5	1680	3495	3000	1
02040MR1037M66	3x70+3x35/3	49,6	2352	4450	4200	2/0
02040MR1037M67	3x95+3x50/3	54,7	3216	5545	5700	3/0
02040MR1037M68	3x120+3x70/3	59	4128	6920	7200	4/0
02040MR1037M69	3x150+3x70/3	64,7	4992	8180	9000	250 MCM
02040MR1037M70	3x185+3x95/3	68,8	6240	9730	11100	350 MCM
02040MR1037M71	3x240+3x120/3	75,9	8064	12445	14400	450 MCM

6/10 kV (12) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02040QR1037M63	3x25+3x25/3	40,9	960	2520	1500	4
02040QR1037M64	3x35+3x25/3	43,5	1248	3040	2100	2
02040QR1037M65	3x50+3x25/3	46,5	1680	3570	3000	1
02040QR1037M66	3x70+3x35/3	50,4	2352	4540	4200	2/0
02040QR1037M67	3x95+3x50/3	55,5	3216	5665	5700	3/0
02040QR1037M68	3x120+3x70/3	59,8	4128	7028	7200	4/0
02040QR1037M69	3x150+3x70/3	65,5	4992	8300	9000	250 MCM
02040QR1037M70	3x185+3x95/3	69,4	6240	9805	11100	350 MCM
02040QR1037M71	3x240+3x120/3	76,8	8064	12590	14400	450 MCM

8,7/15 kV (18) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02040SR1037M63	3x25+3x25/3	44,3	960	2820	1500	4
02040SR1037M64	3x35+3x25/3	47	1248	3370	2100	2
02040SR1037M65	3x50+3x25/3	49,8	1680	3935	3000	1
02040SR1037M66	3x70+3x35/3	55,1	2352	5070	4200	2/0
02040SR1037M67	3x95+3x50/3	59	3216	6085	5700	3/0
02040SR1037M68	3x120+3x70/3	64,9	4128	7715	7200	4/0
02040SR1037M69	3x150+3x70/3	69	4992	8790	9000	250 MCM
02040SR1037M70	3x185+3x95/3	72	6240	10215	11100	350 MCM
02040SR1037M71	3x240+3x120/3	79,4	8064	13010	14400	450 MCM

12/20 kV (24) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02040UR1037M63	3x25+3x25/3	49,5	960	3340	1500	4
02040UR1037M64	3x35+3x25/3	53,4	1248	4060	2100	2
02040UR1037M65	3x50+3x25/3	56,2	1680	4650	3000	1
02040UR1037M66	3x70+3x35/3	60,3	2352	5720	4200	2/0
02040UR1037M67	3x95+3x50/3	65,7	3216	7010	5700	3/0
02040UR1037M68	3x120+3x70/3	70	4128	8460	7200	4/0
02040UR1037M69	3x150+3x70/3	75,9	4992	9880	9000	250 MCM
02040UR1037M70	3x185+3x95/3	79	6240	11360	11100	350 MCM
02040UR1037M71	3x240+3x120/3	84,6	8064	13870	14400	450 MCM

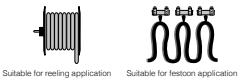
20/35 kV (42) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02040YR1037M66	3x70+3x35/3	82	2352	9260	4200	2/0

Other dimensions and colors available on request.

FLEXIDRUM® MEDIUM (N)TSCGEWÖU

From 3,6/6 Kv up to 20/35 Kv with antitwisting protection



	Max resistance		Reactance at 50 Hz for nominal voltage			
Nominal cross section mm²	D.C. at 20°C Ohm/km	A.C. at 90°C Ohm/km	3,6/6 Ohm/km	6/10 Ohm/km	8,7/15 Ohm/km	12/20 Ohm/km
25	0,780	0,995	0,106	0,107	0,114	0,123
35	0,554	0,707	0,100	0,101	0,107	0,116
50	0,386	0,493	0,095	0,097	0,102	0,110
70	0,272	0,348	0,090	0,092	0,097	0,104
95	0,206	0,264	0,087	0,088	0,093	0,099
120	0,161	0,207	0,084	0,085	0,089	0,095
150	0,129	0,167	0,082	0,083	0,087	0,092
185	0,106	0,139	0,080	0,081	0,085	0,090
240	0,0801	0,107	0,079	0,079	0,083	0,087

Correction factors for ambient temperature other than 30°C

°C	20	25	30	40	45	50	55
K	1,1	1,05	0,95	0,89	0,84	0,77	0,71

FLEXIDRUM® MEDIUM (N)TSCGEWÖU OPTICAL FIBER

From 3,6/6 Kv up to 20/35 Kv with antitwisting protection and optical element


Suitable for reeling application


Suitable for festoon application

Construction:

Conductor:	flexible tinned copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Inner semi-conductive layer:	semi-conducting compound
Insulation:	rubber EPR type 3GI3
Outer semi-conductive layer:	semi-conducting compound
Earth Conductor:	Flexible tinned copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Earth semi-conductive layer:	semi-conducting compound
Cores color:	**Power:** natural color with black semi-conducting compound **Earth:** black semi-contucting compound
Optical fibers element:	6-12-18 fiber-optics laying in 6 free tubes (1,2 or 3 fibers per tube)
Stranding:	phase units laid up with earth-conductors and fiber optics in interstices
Inner sheath:	rubber PCP type 5GM3
Supporting screen:	anti-twisting protection of synthetic yarns
Outer sheath:	red (similar to RAL 3000) rubber PCP type 5GM5

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Technical data:

Nominal voltage:	U/oU 3,6/6 kV, U/oU 6/10 kV U/oU 8,7/15, U/oU 12/20 kV, 20/35 kV
Max. operating voltage:	U/oU 3,6/6 kV = 7,2 kV U/oU 6/10 kV = 12 kV U/oU 8,7/15 = 18 kV U/oU 12/20 kV = 24 kV U/oU 20/35 kV = 42 kV
Test voltage:	U/oU 3,6/6 kV = 11 kV U/oU 6/10 kV = 17 kV U/oU 8,7/15 = 24 kV U/oU 12/20 kV = 29 kV U/oU 20/35 kV = 50 kV
Temperature range:	
Fixed laying:	-40°C up to +80°C
Flexible installation:	-30°C up to +60°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Min. bending radius:	
Fixed laying:	6 x d
On drums:	12 x D
On deflection pulley:	15 x D
Free movement:	12 x D
Min. distance for change of direction:	20 x D
Max speed (main application):	180 m/min
Max torsion:	± 25°/m

Features:

new version reduced weight and diameter!

on request cold version up to -45°C

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS approval

Applications:

power supply to mobile units with high risk of mechanical damage. It is designed to work with forced guidance systems with defection on different floors and equipment with reel axis in direction of travel

FLEXIDRUM® MEDIUM (N)TSCGEWÖU OPTICAL FIBER

From 3,6/6 Kv up to 20/35 Kv with antitwisting protection and optical element


Suitable for reeling application


Suitable for festoon application

3,6/6 kV (7,2) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02050MR1037M63	3x25+2x25/2+FO	40,3	960	2495	1500	4
02050MR1037M64	3x35+2x25/2+FO	42,7	1248	2990	2100	2
02050MR1037M65	3x50+2x25/2+FO	45,5	1680	3520	3000	1
02050MR1037M66	3x70+2x35/2+FO	49,6	2352	4518	4200	2/0
02050MR1037M67	3x95+2x50/2+FO	54,7	3216	5590	5700	3/0
02050MR1037M68	3x120+2x70/2+FO	58,9	4128	6960	7200	4/0
02050MR1037M69	3x150+2x70/2+FO	64,7	4992	8200	9000	250 MCM
02050MR1037M70	3x185+2x95/2+FO	68,4	6240	9770	11100	350 MCM
02050MR1037M71	3x240+2x120/2+FO	78,1	8064	12790	14400	450 MCM

6/10 kV (12) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02050QR1037M63	3x25+2x25/2+FO	41	960	2550	1500	4
02050QR1037M64	3x35+2x25/2+FO	43,5	1248	3070	2100	2
02050QR1037M65	3x50+2x25/2+FO	46,3	1680	3600	3000	1
02050QR1037M66	3x70+2x35/2+FO	50,3	2352	4584	4200	2/0
02050QR1037M67	3x95+2x50/2+FO	55,5	3216	5690	5700	3/0
02050QR1037M68	3x120+2x70/2+FO	59,6	4128	7050	7200	4/0
02050QR1037M69	3x150+2x70/2+FO	65,3	4992	8834	9000	250 MCM
02050QR1037M70	3x185+2x95/2+FO	69,0	6240	9840	11100	350 MCM
02050QR1037M71	3x240+2x120/2+FO	78,8	8064	12890	14400	450 MCM

8,7/15 kV (18) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02050SR1037M63	3x25+2x25/2+FO	47	960	2850	1500	4
02050SR1037M64	3x35+2x25/2+FO	48,2	1248	3404	2100	2
02050SR1037M65	3x50+2x25/2+FO	49,8	1680	3970	3000	1
02050SR1037M66	3x70+2x35/2+FO	55,1	2352	5140	4200	2/0
02050SR1037M67	3x95+2x50/2+FO	59	3216	6125	5700	3/0
02050SR1037M68	3x120+2x70/2+FO	64,9	4128	7786	7200	4/0
02050SR1037M69	3x150+2x70/2+FO	69	4992	8830	9000	250 MCM
02050SR1037M70	3x185+2x95/2+FO	72	6240	10268	11100	350 MCM
02050SR1037M71	3x240+2x120/2+FO	80,7	8064	13207	14400	450 MCM

12/20 kV (24) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02050UR1037M63	3x25+2x25/2+FO	49,5	960	3380	1500	4
02050UR1037M64	3x35+2x25/2+FO	53,4	1248	4095	2100	2
02050UR1037M65	3x50+2x25/2+FO	57,2	1680	4675	3000	1
02050UR1037M66	3x70+2x35/2+FO	60,3	2352	5807	4200	2/0
02050UR1037M67	3x95+2x50/2+FO	65,7	3216	7040	5700	3/0
02050UR1037M68	3x120+2x70/2+FO	70	4128	8530	7200	4/0
02050UR1037M69	3x150+2x70/2+FO	75,9	4992	9935	9000	250 MCM
02050UR1037M70	3x185+2x95/2+FO	79	6240	11395	11100	350 MCM
02050UR1037M71	3x240+2x120/2+FO	84,6	8064	13915	14400	450 MCM

20/35 kV (42) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02050YR1037M66	3x70+2x35/2+FO	82	2352	9260	4200	2/0

Other dimensions and colors available on request.

FLEXIDRUM® MEDIUM (N)TSCGEWÖU OPTICAL FIBER

From 3,6/6 Kv up to 20/35 Kv with antitwisting protection and optical element


Suitable for reeling application


Suitable for festoon application

	Max resistance		Reactance at 50 Hz for nominal voltage			
Nominal cross section mm²	D.C. at 20°C Ohm/km	A.C. at 90°C Ohm/km	3,6/6 Ohm/km	6/10 Ohm/km	8,7/15 Ohm/km	12/20 Ohm/km
25	0,780	0,995	0,106	0,107	0,114	0,123
35	0,554	0,707	0,100	0,101	0,107	0,116
50	0,386	0,493	0,095	0,097	0,102	0,110
70	0,272	0,348	0,090	0,092	0,097	0,104
95	0,206	0,264	0,087	0,088	0,093	0,099
120	0,161	0,207	0,084	0,085	0,089	0,095
150	0,129	0,167	0,082	0,083	0,087	0,092
185	0,106	0,139	0,080	0,081	0,085	0,090
240	0,0801	0,107	0,079	0,079	0,083	0,087

Correction factors for ambient temperature other than 30°C

°C	20	25	30	40	45	50	55
K	1,1	1,05	0,95	0,89	0,84	0,77	0,71

Optical parameters:

Trasmission data of the fiber-optics	Graded-index fiber 50/125	Graded-index fiber 62.5/125	Monomode fiber E9/125
Max attenuation at wavelength 850 m	2,8 dB/km	3,3 dB/km	-
Max attenuation at wavelength 1300 m	0,8 dB/km	0,4 dB/km	0,9 dB/km
Max attenuation at wavelength 1550 m	-	-	0,3 dB/km
Bandwidth at 850 nm	>400 MHz	>400 MHz	-
Bandwidth at 1300 nm	>1200 MHz	>600 MHz	-
Numerical aperture	0,200+/-0,200	0,275+/-0,02	0,14+/-0,02
Chromatic dispersion at 1300 nm	-	-	<3,5 ps/nm km
Chromatic dispersion at 1550 nm	-	-	<3,5 ps/nm km

FLEXIDRUM® MEDIUM PLUS (N)TSCGEWÖU

From 3,6/6 Kv up to 12/20 Kv with antitwisting protection


Suitable for reeling application


Suitable for festoon application

Construction:

Conductor:	flexible red copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Inner semi-conductive layer:	semi-conducting compound
Insulation:	rubber EPR type 3GI3
Outer semi-conductive layer:	semi-conducting compound
Earth Conductor:	Flexible red copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Earth semi-conductive layer:	semi-conducting compound
Cores color:	**Power:** natural color with black semi-conducting compound **Earth:** black semi-contucting compound
Central unit:	semi-contucting rubber compound
Stranding:	phase units laid up with earth-conductors in interstices
Inner sheath:	rubber EPR type GM1b
Supporting screen:	anti-twisting protection of synthetic yarns
Outer sheath:	red (similar to RAL 3000) rubber PCP type 5GM5

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Technical data:

Nominal voltage:	U/oU 3,6/6 kV, U/oU 6/10 kV U/oU 8,7/15, U/oU 12/20 kV
Max. operating voltage:	U/oU 3,6/6 kV = 7,2 kV U/oU 6/10 kV = 12 kV U/oU 8,7/15 = 18 kV U/oU 12/20 kV = 24 kV
Test voltage:	U/oU 3,6/6 kV = 11 kV U/oU 6/10 kV = 17 kV U/oU 8,7/15 = 24 kV U/oU 12/20 kV = 29 kV
Temperature range:	
Fixed laying:	-50°C up to +80°C
Flexible installation:	-35°C up to +80°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Min. bending radius:	
Fixed laying:	6 x D
On drums:	12 x D
On deflection pulley:	15 x D
Min. distance for change of direction:	20 x D
Max speed (main application):	300 m/min
Max torsion:	± 25°/m

Features:

max. speed up to 300 m/min!

new version reduced weight and diameter!

acc. to DIN VDE 0250 part 813, and 0298-3/4

UL and MSHA approval on request

*after verify of the application by Elettrotek Kabel

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS approval

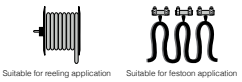
RoHS

Applications:

power supply to mobile units with high risk of mechanical damage. It is designed to work with forced guidance systems with defection on different floors and equipment with reel axis in direction of travel

FLEXIDRUM® MEDIUM PLUS (N)TSCGEWÖU

From 3,6/6 Kv up to 12/20 Kv with antitwisting protection



3,6/6 kV (7,2) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02045MR1037M63	3x25+3x25/3	42	960	2540	3000	4
02045MR1037M64	3x35+3x25/3	43,5	1248	2825	3000	2
02045MR1037M65	3x50+3x25/3	47,5	1680	3560	3000	1
02045MR1037M66	3x70+3x35/3	51,5	2352	4370	4200	2/0
02045MR1037M67	3x95+3x50/3	56	3216	5470	5700	3/0
02045MR1037M68	3x120+3x70/3	59,5	4156	6500	7200	4/0
02045MR1037M69	3x150+3x70/3	65,5	4992	7830	9000	250 MCM
02045MR1037M70	3x185+3x95/3	69,5	6240	9370	11100	350 MCM
02045MR1037M71	3x240+3x95/3	74,5	7824	11360	14400	450 MCM

6/10 kV (12) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02045QR1037M63	3x25+3x25/3	42	960	2540	3000	4
02045QR1037M64	3x35+3x25/3	43,5	1248	2825	3000	2
02045QR1037M65	3x50+3x25/3	47,5	1680	3560	3000	1
02045QR1037M66	3x70+3x35/3	51,5	2352	4370	4200	2/0
02045QR1037M67	3x95+3x50/3	56	3216	5470	5700	3/0
02045QR1037M68	3x120+3x70/3	59,5	4156	6500	7200	4/0
02045QR1037M69	3x150+3x70/3	65,5	4992	7830	9000	250 MCM
02045QR1037M70	3x185+3x95/3	69,5	6240	9370	11100	350 MCM
02045QR1037M71	3x240+3x95/3	74,5	7824	11360	14400	450 MCM

8,7/15 kV (18) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02045SR1037M63	3x25+3x25/3	42	960	2540	3000	4
02045SR1037M64	3x35+3x25/3	43,5	1248	2825	3000	2
02045SR1037M65	3x50+3x25/3	47,5	1680	3560	3000	1
02045SR1037M66	3x70+3x35/3	51,5	2352	4370	4200	2/0
02045SR1037M67	3x95+3x50/3	56	3216	5470	5700	3/0
02045SR1037M68	3x120+3x70/3	59,5	4156	6500	7200	4/0
02045SR1037M69	3x150+3x70/3	65,5	4992	7830	9000	250 MCM
02045SR1037M70	3x185+3x95/3	69,5	6240	9370	11100	350 MCM
02045SR1037M71	3x240+3x95/3	74,5	7824	11360	14400	450 MCM

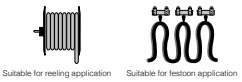
12/20 kV (24) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02045UR1037M63	3x25+3x25/3	47	960	2990	3000	4
02045UR1037M64	3x35+3x25/3	48,5	1248	3300	3000	2
02045UR1037M65	3x50+3x25/3	50,5	1680	3820	3000	1
02045UR1037M66	3x70+3x35/3	56,5	2352	4880	4200	2/0
02045UR1037M67	3x95+3x50/3	61	3216	5950	5700	3/0
02045UR1037M68	3x120+3x70/3	63,5	4156	7000	7200	4/0
02045UR1037M69	3x150+3x70/3	67,5	4992	8250	9000	250 MCM
02045UR1037M70	3x185+3x95/3	71,5	6240	9650	11100	350 MCM
02045UR1037M71	3x240+3x95/3	78,5	7824	12150	14400	450 MCM
02045UR1037M72	3x300+3x120/3	82	9792	14400	18000	550 MCM

Other dimensions and colors available on request.

FLEXIDRUM® MEDIUM PLUS (N)TSCGEWÖU

From 3,6/6 Kv up to 12/20 Kv with antitwisting protection



	Max resistance		Reactance at 50 Hz for nominal voltage			
Nominal cross section mm²	D.C. at 20°C Ohm/km	A.C. at 90°C Ohm/km	3,6/6 Ohm/km	6/10 Ohm/km	8,7/15 Ohm/km	12/20 Ohm/km
25	0,780	0,995	0,106	0,107	0,114	0,123
35	0,554	0,707	0,100	0,101	0,107	0,116
50	0,386	0,493	0,095	0,097	0,102	0,110
70	0,272	0,348	0,090	0,092	0,097	0,104
95	0,206	0,264	0,087	0,088	0,093	0,099
120	0,161	0,207	0,084	0,085	0,089	0,095
150	0,129	0,167	0,082	0,083	0,087	0,092
185	0,106	0,139	0,080	0,081	0,085	0,090
240	0,0801	0,107	0,079	0,079	0,083	0,087

Correction factors for ambient temperature other than 30°C

°C	20	25	30	40	45	50	55
K	1,1	1,05	0,95	0,89	0,84	0,77	0,71

FLEXIDRUM® MEDIUM PLUS (N)TSCGEWÖU OPTICAL FIBER

From 3,6/6 Kv up to 18/30 Kv with antitwisting protection and optical fiber


Suitable for reeling application


Suitable for festoon application

Construction:

Conductor:	flexible red copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Inner semi-conductive layer:	semi-conducting compound
Insulation:	rubber EPR type 3GI3
Outer semi-conductive layer:	semi-conducting compound
Earth Conductor:	Flexible red copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Earth semi-conductive layer:	semi-conducting compound
Cores color:	**Power:** natural color with black semi-conducting compound **Earth:** black semi-contucting compound
Fiber optics:	6/12/24 fiber-optics laid-up as below*: **≤35 mm²:** 12 fibers laying in 1 reinforced tube **≥ 50 mm²:** 6 fibers laying in 2 gel filled tubes * laid-up referred for 12 fiber-optics version
Central unit:	semi-contucting rubber compound
Stranding:	phase units laid up with earth-conductors and fiber optics in interstices
Inner sheath:	rubber EPR type GM1b
Supporting screen:	anti-twisting protection of synthetic yarns
Outer sheath:	red (similar to RAL 3000) rubber PCP type 5GM5

Technical data:

Nominal voltage:	U/oU 3,6/6 kV, U/oU 6/10 kV U/oU 8,7/15, U/oU 12/20 kV, U/oU 14/25 kV, U/oU 18/30 kV
Max. operating voltage:	U/oU 3,6/6 kV = 7,2 kV U/oU 6/10 kV = 12 kV U/oU 8,7/15 = 18 kV U/oU 12/20 kV = 24 kV U/oU 14/25 kV = 30 kV U/oU 18/30 kV = 36 kV
Test voltage:	U/oU 3,6/6 kV = 11 kV U/oU 6/10 kV = 17 kV U/oU 8,7/15 = 24 kV U/oU 12/20 kV = 29 kV U/oU 14/25 kV = 36 kV U/oU 18/30 kV = 43 kV
Temperature range:	
Fixed laying:	-50°C up to +80°C
Flexible installation:	-35°C up to +80°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Min. bending radius:	
Fixed laying:	6 x D
On drums:	12 x D
On deflection pulley:	15 x D
Min. distance for change of direction:	20 x D
Max speed (main application):	300 m/min
Max torsion:	± 25°/m

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Features:

max. speed up to 300 m/min!

new version reduced weight and diameter!

acc. to DIN VDE 0250 part 813, and 0298-3/4

UL and MSHA approval on request

*after verify of the application by Elettrotek Kabel

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS approval

Applications:

power supply to mobile units with high risk of mechanical damage. It is designed to work with forced guidance systems with defection on different floors and equipment with reel axis in direction of travel

FLEXIDRUM® MEDIUM PLUS (N)TSCGEWÖU OPTICAL FIBER

From 3,6/6 Kv up to 18/30 Kv with antitwisting protection and optical fiber


Suitable for reeling application


Suitable for festoon application

3,6/6 kV (7,2) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02055MR1037M63	3x25+2x25/2+12FO	41,5	960	2600	1500	4
02055MR1037M64	3x35+2x25/2+12FO	43,5	1248	2840	2100	2
02055MR1037M65	3x50+2x25/2+12FO	47,5	1680	3550	3000	1
02055MR1037M66	3x70+2x35/2+12FO	51,5	2352	4350	4200	2/0
02055MR1037M67	3x95+2x50/2+12FO	56,5	3216	5470	5700	3/0
02055MR1037M68	3x120+2x70/2+12FO	60,5	4128	6490	7200	4/0
02055MR1037M69	3x150+2x70/2+12FO	65,5	4992	7980	9000	250 MCM
02055MR1037M70	3x185+2x95/2+12FO	69,5	6240	9450	11100	350 MCM
02055MR1037M71	3x240+2x120/2+12FO	75	8064	11590	14400	450 MCM

6/10 kV (12) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02055QR1037M63	3x25+2x25/2+12FO	41,5	960	2600	1500	4
02055QR1037M64	3x35+2x25/2+12FO	43,5	1248	2840	2100	2
02055QR1037M65	3x50+2x25/2+12FO	47,5	1680	3550	3000	1
02055QR1037M66	3x70+2x35/2+12FO	51,5	2352	4350	4200	2/0
02055QR1037M67	3x95+2x50/2+12FO	56,5	3216	5470	5700	3/0
02055QR1037M68	3x120+2x70/2+12FO	60,5	4128	6490	7200	4/0
02055QR1037M69	3x150+2x70/2+12FO	65,5	4992	7980	9000	250 MCM
02055QR1037M70	3x185+2x95/2+12FO	69,5	6240	9450	11100	350 MCM
02055QR1037M71	3x240+2x120/2+12FO	75	8064	11590	14400	450 MCM

8,7/15 kV (18) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02055SR1037M63	3x25+2x25/2+12FO	43,5	960	2600	1500	4
02055SR1037M64	3x35+2x25/2+12FO	44,5	1248	2840	2100	2
02055SR1037M65	3x50+2x25/2+12FO	47,5	1680	3550	3000	1
02055SR1037M66	3x70+2x35/2+12FO	51,5	2352	4350	4200	2/0
02055SR1037M67	3x95+2x50/2+12FO	56,5	3216	5470	5700	3/0
02055SR1037M68	3x120+2x70/2+12FO	60,5	4128	6490	7200	4/0
02055SR1037M69	3x150+2x70/2+12FO	65,5	4992	7980	9000	250 MCM
02055SR1037M70	3x185+2x95/2+12FO	69,5	6240	9450	11100	350 MCM
02055SR1037M71	3x240+2x120/2+12FO	75	8064	11590	14400	450 MCM

12/20 kV (24) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02055UR1037M63	3x25+2x25/2+12FO	49,5	960	3160	1500	4
02055UR1037M64	3x35+2x25/2+12FO	50,5	1248	3480	2100	2
02055UR1037M65	3x50+2x25/2+12FO	51,5	1680	3900	3000	1
02055UR1037M66	3x70+2x35/2+12FO	56,5	2352	4950	4200	2/0
02055UR1037M67	3x95+2x50/2+12FO	59,5	3216	5900	5700	3/0
02055UR1037M68	3x120+2x70/2+12FO	62,5	4128	7000	7200	4/0
02055UR1037M69	3x150+2x70/2+12FO	67,5	4992	8210	9000	250 MCM
02055UR1037M70	3x185+2x95/2+12FO	71,5	6240	9680	11100	350 MCM
02055UR1037M71	3x240+2x120/2+12FO	78,5	8064	12180	14400	450 MCM

Other dimensions and colors available on request.

FLEXIDRUM® MEDIUM PLUS (N)TSCGEWÖU OPTICAL FIBER

From 3,6/6 Kv up to 18/30 Kv with antitwisting protection and optical fiber

14/25 kV (30) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02055WR1037M63	3x25+2x25/2+12FO	55,5	960	3880	1500	4
02055WR1037M64	3x35+2x25/2+12FO	55,5	1248	4010	2100	2
02055WR1037M65	3x50+2x25/2+12FO	57,5	1680	4550	3000	1
02055WR1037M66	3x70+2x35/2+12FO	60,5	2352	5500	4200	2/0
02055WR1037M67	3x95+2x50/2+12FO	66,5	3216	6940	5700	3/0
02055WR1037M68	3x120+2x70/2+12FO	67,5	4128	7560	7200	4/0
02055WR1037M69	3x150+2x70/2+12FO	71,5	4992	8710	9000	250 MCM
02055WR1037M70	3x185+2x95/2+12FO	75,5	6240	10250	11100	350 MCM
02055WR1037M71	3x240+2x120/2+12FO	82	8064	12600	14400	450 MCM

18/30 kV (36) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02055XR1037M63	3x25+2x25/2+12FO	61,5	960	4700	1500	4
02055XR1037M64	3x35+2x25/2+12FO	61,5	1248	4800	2100	2
02055XR1037M65	3x50+2x25/2+12FO	63,5	1680	5300	3000	1
02055XR1037M66	3x70+2x35/2+12FO	66,5	2352	6300	4200	2/0
02055XR1037M67	3x95+2x50/2+12FO	69,5	3216	7300	5700	3/0
02055XR1037M68	3x120+2x70/2+12FO	72,5	4128	8320	7200	4/0
02055XR1037M69	3x150+2x70/2+12FO	77,5	4992	9600	9000	250 MCM
02055XR1037M70	3x185+2x95/2+12FO	82	6240	11200	11100	350 MCM
02055XR1037M71	3x240+2x120/2+12FO	87	8064	13510	14400	450 MCM

FLEXIDRUM® MEDIUM PLUS (N)TSCGEWÖU OPTICAL FIBER

From 3,6/6 Kv up to 18/30 Kv with antitwisting protection and optical fiber


Suitable for reeling application


Suitable for festoon application

	Max resistance		Reactance at 50 Hz for nominal voltage			
Nominal cross section mm²	D.C. at 20°C Ohm/km	A.C. at 90°C Ohm/km	3,6/6 Ohm/km	6/10 Ohm/km	8,7/15 Ohm/km	12/20 Ohm/km
25	0,780	0,995	0,106	0,107	0,114	0,123
35	0,554	0,707	0,100	0,101	0,107	0,116
50	0,386	0,493	0,095	0,097	0,102	0,110
70	0,272	0,348	0,090	0,092	0,097	0,104
95	0,206	0,264	0,087	0,088	0,093	0,099
120	0,161	0,207	0,084	0,085	0,089	0,095
150	0,129	0,167	0,082	0,083	0,087	0,092
185	0,106	0,139	0,080	0,081	0,085	0,090
240	0,0801	0,107	0,079	0,079	0,083	0,087

Correction factors for ambient temperature other than 30°C

°C	10	20	30	40	50	60	70
K	1,15	1,08	1	0,91	0,82	0,71	0,58

Optical parameters:

Trasmission data of the fiber-optics	Graded-index fiber 50/125	Graded-index fiber 62.5/125	Monomode fiber E9/125
Max attenuation at wavelength 850 nm	nom. ≤ 2,6 max. ≤ 3,0	nom. ≤ 2,6 max. ≤ 3,5	-
Max attenuation at wavelength 1300 nm	nom. ≤ 0,8 max. ≤ 1	nom. ≤ 0,8 max. ≤ 1.5	-
Max attenuation at wavelength 1310 nm	-	≤ 3 dB/km	nom. ≤ 0,35 max. ≤ 0,40
Max attenuation at wavelength 1383 nm	-	≤ 0,8 dB/km	nom. ≤ 0,33 max. ≤ 0,40
Max attenuation at wavelength 1550 nm	-	-	nom. ≤ 0,20 max. ≤ 0,28
Bandwidth at 850 nm	600 MHz/km	200 MHz/km	-
Bandwidth at 1300 nm	1200 MHz/km	500 MHz/km	-
Numerical aperture	0,20+/-0,015	0,27+/-0,015	-
Chromatic dispersion at 1285/1330 nm	-	-	≤ 3,5 ps/nm x km
Chromatic dispersion at 1300 nm	-	-	-
Chromatic dispersion at 1550 nm	-	-	≤ 18 ps/nm x km
Chromatic dispersion at 1625 nm	-	-	≤ 22 ps/nm x km

FLEXIDRUM® MEDIUM (N)TSCGEWÖU TUNNEL

From 3,6/6 Kv up to 12/20 Kv

Suitable for reeling application

Construction:

Conductor:	flexible tinned copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Inner semi-conductive layer:	semi-conducting compound
Insulation:	rubber EPR type 3GI3
Outer semi-conductive layer:	semi-conducting compound
Earth conductor:	tinned copper/textile braid combinated laying concentric around each power cores
Cores color:	**Power:** natural color with black semi-conducting compound **Control:** black semi-contucting compound
Stranding:	phase units laid up with control conductors in interstices
Inner sheath:	rubber EPR type GM1b, acc. to DIN VDE 0207 part 21
monitoring conductor:	red copper wires, laying concentric between inner and outer sheath (6 ÜL KON)
Outer sheath:	red (similar to RAL 3000) rubber PCP type 5GM5

Technical data:

Nominal voltage:	U/oU 3,6/6 kV, U/oU 6/10 kV, U/oU 8,7/15 kV, U/oU 12/20 kV
Max. operating voltage A.C.:	U/oU 3,6/6 kV = 4,2/7,2 kV U/oU 6/10 kV = 6,9/12 kV U/oU 8,7/15 kV =10,4/18 kV U/oU 12/20 kV = 13,9/24 kV
Max. operating voltage D.C.:	U/oU 3,6/6 kV = 5,4/10,8 kV U/oU 6/10 kV = 9/18 kV U/oU 8,7/15 kV =13,5/27 kV U/oU 12/20 kV = 18/36 kV
Test voltage:	U/oU 3,6/6 kV = 11 kV U/oU 6/10 kV = 17 kV U/oU 8,7/15 kV = 24 kV U/oU 12/20 kV = 29 kV
Temperature range:	
Fixed laying:	-40°C up to +80°C
Flexible installation:	-20°C up to +80°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Min. bending radius:	
Fixed laying:	6 x D
On drums:	12 x D
On deflection pulley:	15 x D
Min. distance for change of direction:	20 x D
Current carryng capacity:	acc. to DIN VDE 0298, part 4
Tensile strenght:	up to 15 N/mm²
Max speed (main application):	60 m/min
Max torsion:	± 25°/m

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Features:

new version! for use in TBM's

outdoor/indoor use

ozone, moisture, water resistant

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS approval

RoHS

Applications:

appropriate for reeling power supply cables
mines in TBM'S machines and underground
mines for tunnel construction applications

FLEXIDRUM® MEDIUM (N)TSCGEWÖU TUNNEL

From 3,6/6 Kv up to 12/20 Kv

3,6/6 kV (7,2) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02060MR1037M63	3x25+3x16/3E +3x2,5ST + 6ÜL KON	41,7	2775	1125	4
02060MR1037M64	3x35+3x25/3E +3x2,5ST + 6ÜL KON	45,4	3205	1575	2
02060MR1037M65	3x50+3x25/3E +3x2,5ST + 6ÜL KON	49,9	4040	2250	1
02060MR1037M66	3x70+3x35/3E +3x2,5ST + 6ÜL KON	53,1	5030	3150	2/0
02060MR1037M67	3x95+3x50/3E +3x2,5ST + 6ÜL KON	59,1	6278	4275	3/0
02060MR1037M68	3x120+3x70/3E +3x2,5ST + 6ÜL KON	62,9	7365	5400	4/0

6/10 kV (12) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02060QR1037M63	3x25+3x16/3E +3x2,5ST + 6ÜL KON	44,2	2975	1125	4
02060QR1037M64	3x35+3x25/3E +3x2,5ST + 6ÜL KON	46,7	3420	1575	2
02060QR1037M65	3x50+3x25/3E +3x2,5ST + 6ÜL KON	51,2	4257	2250	1
02060QR1037M66	3x70+3x35/3E +3x2,5ST + 6ÜL KON	56,1	5268	3150	2/0
02060QR1037M67	3x95+3x50/3E +3x2,5ST + 6ÜL KON	61,4	6538	4275	3/0
02060QR1037M68	3x120+3x70/3E +3x2,5ST + 6ÜL KON	65,1	7637	5400	4/0

FLEXIDRUM® MEDIUM (N)TSCGEWÖU TUNNEL

From 3,6/6 Kv up to 12/20 Kv

8,7/15 kV (18) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02060SR1037M64	3x35+3x25/3E +3x2,5ST + 6ÜL KON	49,5	4017	1575	2

12/20 kV (24) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02060UR1037M63	3x25+3x16/3E +3x2,5ST + 6ÜL KON	50,5	3527	1125	4
02060UR1037M64	3x35+3x25/3E +3x2,5ST + 6ÜL KON	53,3	4140	1575	2
02060UR1037M65	3x50+3x25/3E +3x2,5ST + 6ÜL KON	58,4	5060	2250	1
02060UR1037M66	3x70+3x35/3E +3x2,5ST + 6ÜL KON	62	6059	3150	2/0
02060UR1037M67	3x95+3x50/3E +3x2,5ST + 6ÜL KON	68,1	7512	4275	3/0
02060UR1037M68	3x120+3x70/3E +3x2,5ST + 6ÜL KON	71,9	8815	5400	4/0

Other dimensions and colors available on request.

FLEXIDRUM® MEDIUM R 903

From 3,6/6 Kv up to 12/20 Kv

Suitable for reeling application

Construction:

Conductor:	flexible red copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Inner semi-conductive layer:	semi-conducting compound
Insulation:	rubber EPR compound type IEC 60502-2
Outer semi-conductive layer:	semi-conducting compound + red copper braid
Earth conductor:	flexible red copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Earth semi-conductive layer:	semi-conducting compound
Cores color:	**Power:** natural color with black semi-conducting compound **Earth:** black semi-contucting compound
Central unit:	aramide yarns
Inner sheath:	haologen-free compound
monitoring conductor:	semi-conducting compound + red copper braid laying concentric between inner and outer sheath
Outer sheath:	red (similar to RAL 3000), special PUR compound

Technical data:

Nominal voltage:	U/oU 3,6/6 kV, U/oU 6/10 kV U/oU 12/20 kV
Max. operating voltage A.C.:	U/oU 3,6/6 kV = 4,2/7,2 kV U/oU 6/10 kV = 6,9/12 kV U/oU 12/20 kV = 13,9/24 kV
Max. operating voltage D.C.:	U/oU 3,6/6 kV = 5,4/10 kV U/oU 6/10 kV = 9/18 kV U/oU 12/20 kV = 18/36 kV
Test voltage (15 min.):	U/oU 3,6/6 kV = 13 kV U/oU 6/10 kV = 21 kV U/oU 12/20 kV = 42 kV
Temperature range:	
Fixed laying:	-40°C up to +80°C
Flexible installation:	-20°C up to +80°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Min. bending radius:	
Fixed laying:	8 x d
Flexible installation:	
6/10 kV:	10 x D
12/20 kV:	12 x D
Current carryng capacity:	acc. to DIN VDE 0298, part 4
Tensile strenght:	up to 20 N/mm²
Max speed (main application):	60 m/min
Max torsion:	± 25°/m

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Features:

new version! for use in TBM's

outdoor/indoor use

ozone, moisture, water resistant

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS approval

Applications:

appropriate for reeling power supply cables
mines in TBM'S machines and underground
mines for tunnel construction applications

FLEXIDRUM® MEDIUM R 903

From 3,6/6 Kv up to 12/20 Kv

3,6/6 kV (7,2) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02130MR1037M63	3x25+3x16/3E +3x2,5 + 6ÜL KON	40	2130	1500	4
02130MR1037M64	3x35+3x25/3E +3x2,5 + 6ÜL KON	43,5	2460	2100	2
02130MR1037M65	3x50+3x25/3E +3x2,5 + 6ÜL KON	47,5	3310	3000	1
02130MR1037M66	3x70+3x35/3E +3x2,5 + 6ÜL KON	51	4270	4200	2/0
02130MR1037M67	3x95+3x50/3E +3x2,5 + 6ÜL KON	57	5520	5700	3/0
02130MR1037M68	3x120+3x70/3E +3x2,5 + 6ÜL KON	61	6480	7200	4/0

6/10 kV (12) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02130QR1037M63	3x25+3x16/3E +3x2,5 + 6ÜL KON	42,5	2800	1500	4
02130QR1037M64	3x35+3x25/3E +3x2,5 + 6ÜL KON	46	3400	2100	2
02130QR1037M65	3x50+3x25/3E +3x2,5 + 6ÜL KON	50,5	4000	3000	1
02130QR1037M66	3x70+3x35/3E +3x2,5 + 6ÜL KON	54	5050	4200	2/0
02130QR1037M67	3x95+3x50/3E +3x2,5 + 6ÜL KON	60,5	6350	5700	3/0
02130QR1037M68	3x120+3x70/3E +3x2,5 + 6ÜL KON	64	7600	7200	4/0

12/20 kV (24) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02130UR1037M64	3x35+3x25/3E +3x2,5 + 6ÜL KON	52	3950	2100	2
02130UR1037M65	3x50+3x25/3E +3x2,5 + 6ÜL KON	55	4550	3000	1
02130UR1037M66	3x70+3x35/3E +3x2,5 + 6ÜL KON	59,5	5700	4200	2/0
02130UR1037M67	3x95+3x50/3E +3x2,5 + 6ÜL KON	66	7050	5700	3/0
02130UR1037M68	3x120+3x70/3E +3x2,5 + 6ÜL KON	69,5	8250	7200	4/0

Other dimensions and colors available on request.

FLEXIDRUM® MEDIUM (N)TSCGEWÖU WATER

From 1,8/3 Kv up to 18/30 Kv

Construction:

Conductor:	flexible tinned copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Inner semi-conductive layer:	semi-conducting compound
Insulation:	rubber EPR compound type 3GI3
Outer semi-conductive layer:	semi-conducting compound
Earth conductor:	flexible tinned copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Earth semi-conductive layer:	semi-conducting compound
Cores color:	**Power:** natural color with black semi-conducting compound **Earth:** black semi-contucting compound
Stranding:	phase units laid up with earth-conductors in interstices
Inner sheath:	rubber EPR type GM1b
Outer sheath:	red (similar to RAL 3000), special PCP type 5GM3

Technical data:

Nominal voltage:	U/oU 1,8/3 kV, U/oU 3,6/6 kV, U/oU 6/10 kV, U/oU 8,7/15 kV, U/oU 12/20 kV, U/oU 14/25 kV, U/oU 18/30 kV
Max. operating voltage A.C.:	U/oU 1,8/3 kV = 2,1/3,6 kV U/oU 3,6/6 kV = 4,7/7,2 kV U/oU 6/10 kV = 6,9/12 kV U/oU 8,7/15 kV = 10,4/18 kV U/oU 12/20 kV = 13,9/24 kV U/oU 14/25 kV = 17,3/30 kV U/oU 18/30 kV = 20,8/36 kV
Max. operating voltage D.C.:	U/oU 1,8/3 kV = 2,7/5,4 kV U/oU 3,6/6 kV = 5,4/10,8 kV U/oU 6/10 kV = 9/18 kV U/oU 8,7/15 kV = 13,5/27 kV U/oU 12/20 kV = 18/36 kV U/oU 14/25 kV = 22,5/45 kV U/oU 18/30 kV = 27/54 kV
Test voltage:	U/oU 1,8/3 kV = 6 kV U/oU 3,6/6 kV = 11 kV U/oU 6/10 kV = 17 kV U/oU 8,7/15 kV = 24 kV U/oU 12/20 kV = 29 kV U/oU 14/25 kV = 36 kV U/oU 18/30 kV = 43 kV
Temperature range:	
Fixed laying:	-40°C up to +80°C
Flexible installation:	-20°C up to +60°C
Max. temperature in water:	+ 40°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Min. bending radius:	acc. to DIN VDE 0298, part 3
Tensile strenght:	up to 15 N/mm²
Max torsion:	± 100°/mm

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Water resistance acc. to:
HD 22.16

Features:

for use in water!

outdoor/indoor use

UV, ozone, and moisture resistant

high-mechanical stresses

use in waste water, salt water and brackish water

cold version -45°C possible

GOST-R and others approvals on request

for MINIMUM BENDING RADIUS
see pages from 5 to 8 of catalogue

RoHS approval

Applications:

power supply cable for use in water:
connection to dredgers, pumps, ect.

FLEXIDRUM® MEDIUM (N)TSCGEWÖU WATER

From 1,8/3 Kv up to 18/30 Kv

1,8/3 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02080KR1037M63	3x25+3x16/3	36,9	873,6	2180	1125	4
02080KR1037M64	3x35+3x16/3	39,5	1161,6	2610	1575	2
02080KR1037M65	3x50+3x25/3	43,8	1680	3330	2250	1
02080KR1037M66	3x70+3x35/3	49,1	2352	4370	3150	2/0
02080KR1037M67	3x95+3x50/3	55,3	3216	5660	4275	3/0
02080KR1037M68	3x120+3x70/3	58,6	4128	6725	5400	4/0
02080KR1037M69	3x150+3x70/3	62,6	4992	7820	6750	250 MCM
02080KR1037M70	3x185+3x95/3	68,2	6240	9435	8325	350 MCM

3,6/6 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02080MR1037M63	3x25+3x16/3	41,8	873,6	2625	1125	4
02080MR1037M64	3x35+3x16/3	44,3	1161,6	3080	1575	2
02080MR1037M65	3x50+3x25/3	47,3	1680	3695	2250	1
02080MR1037M66	3x70+3x35/3	54,7	2352	4984	3150	2/0
02080MR1037M67	3x95+3x50/3	57,9	3216	5972	4275	3/0
02080MR1037M68	3x120+3x70/3	61,2	4128	7051	5400	4/0
02080MR1037M69	3x150+3x70/3	66,9	4992	8469	6750	250 MCM
02080MR1037M70	3x185+3x95/3	70,8	6240	9855	8325	350 MCM

6/10 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02080QR1037M63	3x25+3x16/3	43,5	873,6	2780	1125	4
02080QR1037M64	3x35+3x16/3	46	1161,6	3225	1575	2
02080QR1037M65	3x50+3x25/3	48,9	1680	3842	2250	1
02080QR1037M66	3x70+3x35/3	56	2352	5166	3150	2/0
02080QR1037M67	3x95+3x50/3	59,6	3216	6199	4275	3/0
02080QR1037M68	3x120+3x70/3	62,9	4128	7280	5400	4/0
02080QR1037M69	3x150+3x70/3	68,8	4992	8675	6750	250 MCM
02080QR1037M70	3x185+3x95/3	72,5	6240	10100	8325	350 MCM

8,7/15 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02080SR1037M63	3x25+3x16/3	48,1	873,6	3230	1125	4
02080SR1037M64	3x35+3x16/3	50,7	1161,6	3715	1575	2
02080SR1037M65	3x50+3x25/3	55,5	1680	4630	2250	1
02080SR1037M66	3x70+3x35/3	60,7	2352	5793	3150	2/0
02080SR1037M67	3x95+3x50/3	66,1	3216	7111	4275	3/0
02080SR1037M68	3x120+3x70/3	69,4	4128	8262	5400	4/0
02080SR1037M69	3x150+3x70/3	73,3	4992	9418	6750	250 MCM
02080SR1037M70	3x185+3x95/3	78,9	6240	11175	8325	350 MCM

FLEXIDRUM® MEDIUM (N)TSCGEWÖU WATER

From 1,8/3 Kv up to 18/30 Kv

12/20 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02080UR1037M63	3x25+3x16/3	54,3	873,6	3970	1125	4
02080UR1037M64	3x35+3x16/3	56,7	1161,6	4470	1575	2
02080UR1037M65	3x50+3x25/3	59,6	1680	5185	2250	1
02080UR1037M66	3x70+3x35/3	66,8	2352	6645	3150	2/0
02080UR1037M67	3x95+3x50/3	70,4	3216	7750	4275	3/0
02080UR1037M68	3x120+3x70/3	73,6	4128	8920	5400	4/0
02080UR1037M69	3x150+3x70/3	79,2	4992	10510	6750	250 MCM
02080UR1037M70	3x185+3x95/3	82,9	6240	11975	8325	350 MCM

14/25 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02080WR1037M63	3x25+3x16/3	59,5	873,6	4680	1125	4
02080WR1037M64	3x35+3x16/3	62,4	1161,6	5235	1575	2
02080WR1037M65	3x50+3x25/3	67	1680	6215	2250	1
02080WR1037M66	3x70+3x35/3	72,3	2352	7515	3150	2/0
02080WR1037M67	3x95+3x50/3	77,7	3216	8990	4275	3/0
02080WR1037M68	3x120+3x70/3	80,8	4128	10215	5400	4/0
02080WR1037M69	3x150+3x70/3	84,8	4992	11505	6750	250 MCM
02080WR1037M70	3x185+3x95/3	90,5	6240	13427	8325	350 MCM

18/30 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02080XR1037M63	3x25+3x16/3	66,4	873,6	5638	1125	4
02080XR1037M64	3x35+3x16/3	70,1	1161,6	6241	1575	2
02080XR1037M65	3x50+3x25/3	72,1	1680	7045	2250	1
02080XR1037M66	3x70+3x35/3	80	2352	8722	3150	2/0
02080XR1037M67	3x95+3x50/3	82,8	3216	9917	4275	3/0
02080XR1037M68	3x120+3x70/3	85,9	4128	11189	5400	4/0
02080XR1037M69	3x150+3x70/3	91,7	4992	12902	6750	250 MCM
02080XR1037M70	3x185+3x95/3	95,4	6240	14470	8325	350 MCM

Other dimensions and colors available on request.

FLEXIDRUM® MEDIUM (N)TSCGEWÖU WATER.../3E

From 1,8/3 Kv up to 18/30 Kv, with core copper screen

Construction:

Conductor:	flexible tinned copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Inner semi-conductive layer:	semi-conducting compound
Insulation:	rubber EPR compound type 3GI3
Outer semi-conductive layer:	semi-conducting compound
Cores color:	natural color with black semi-conducting compound
Earth conductor:	tinned copper wires laying concentric around each power cores
Inner sheath:	rubber EPR type GM1b
Outer sheath:	red (similar to RAL 3000), special PCP type 5GM3

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Water resistance acc. to:
HD 22.16

Technical data:

Nominal voltage:	U/oU 1,8/3 kV, U/oU 3,6/6 kV, U/oU 6/10 kV, U/oU 8,7/15 kV, U/oU 12/20 kV, U/oU 14/25 kV, U/oU 18/30 kV
Max. operating voltage A.C.:	U/oU 1,8/3 kV = 2,1/3,6 kV U/oU 3,6/6 kV = 4,7/7,2 kV U/oU 6/10 kV = 6,9/12 kV U/oU 8,7/15 kV = 10,4/18 kV U/oU 12/20 kV = 13,9/24 kV U/oU 14/25 kV = 17,3/30 kV U/oU 18/30 kV = 20,8/36 kV
Max. operating voltage D.C.:	U/oU 1,8/3 kV = 2,7/5,4 kV U/oU 3,6/6 kV = 5,4/10,8 kV U/oU 6/10 kV = 9/18 kV U/oU 8,7/15 kV = 13,5/27 kV U/oU 12/20 kV = 18/36 kV U/oU 14/25 kV = 22,5/45 kV U/oU 18/30 kV = 27/54 kV
Test voltage:	U/oU 1,8/3 kV = 6 kV U/oU 3,6/6 kV = 11 kV U/oU 6/10 kV = 17 kV U/oU 8,7/15 kV = 24 kV U/oU 12/20 kV = 29 kV U/oU 14/25 kV = 36 kV U/oU 18/30 kV = 43 kV
Temperature range:	
Fixed laying:	-40°C up to +80°C
Flexible installation:	-20°C up to +60°C
Max. temperature in water:	+ 40°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Min. bending radius:	acc. to DIN VDE 0298, part 3
Tensile strenght:	up to 15 N/mm²
Max torsion:	± 25°/mm

Features:

for use in water!

outdoor/indoor use

UV, ozone, and moisture resistant

high-mechanical stresses

use in waste water, salt water and brackish water

cold version -45°C possible

GOST-R and others approvals on request

for MINIMUM BENDING RADIUS
see pages from 5 to 8 of catalogue

RoHS approval

RoHS

Applications:

power supply cable for use in water:
connection to dredgers, pumps, ect.

FLEXIDRUM® MEDIUM (N)TSCGEWÖU WATER.../3E

From 1,8/3 Kv up to 18/30 Kv, with core copper screen

1,8/3 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02070KR1037M63	3x25+3x16/3E	39,5	873,6	2440	1125	4
02070KR1037M64	3x35+3x16/3E	43,4	1161,6	3020	1575	2
02070KR1037M65	3x50+3x25/3E	49,1	1680	3615	2250	1
02070KR1037M66	3x70+3x35/3E	53,5	2352	4910	3150	2/0
02070KR1037M67	3x95+3x50/3E	58,4	3216	6114	4275	3/0
02070KR1037M68	3x120+3x70/3E	61,9	4128	7305	5400	4/0
02070KR1037M69	3x150+3x70/3E	67,7	4992	8698	6750	250 MCM
02070KR1037M70	3x185+3x95/3E	71,5	6240	10167	8325	350 MCM

3,6/6 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02070MR1037M63	3x25+3x16/3E	44,5	873,6	2920	1125	4
02070MR1037M64	3x35+3x16/3E	47,3	1161,6	3345	1575	2
02070MR1037M65	3x50+3x25/3E	51,1	1680,0	3998	2250	1
02070MR1037M66	3x70+3x35/3E	57,1	2352,0	5339	3150	2/0
02070MR1037M67	3x95+3x50/3E	61,2	3216,0	6460	4275	3/0
02070MR1037M68	3x120+3x70/3E	66,5	4128,0	8150	5400	4/0
02070MR1037M69	3x150+3x70/3E	70,6	4992,0	9020	6750	250 MCM
02070MR1037M70	3x185+3x95/3E	74,3	6240,0	10575	8325	350 MCM

6/10 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02070QR1037M63	3x25+3x16/3E	45,6	873,6	3055	1125	4
02070QR1037M64	3x35+3x16/3E	48,3	1161,6	3530	1575	2
02070QR1037M65	3x50+3x25/3E	53,3	1680,0	4377	2250	1
02070QR1037M66	3x70+3x35/3E	58,7	2352,0	5543	3150	2/0
02070QR1037M67	3x95+3x50/3E	62,6	3216,0	6672	4275	3/0
02070QR1037M68	3x120+3x70/3E	68,1	4128,0	8170	5400	4/0
02070QR1037M69	3x150+3x70/3E	72,0	4992,0	9340	6750	250 MCM
02070QR1037M70	3x185+3x95/3E	77,6	6240,0	11145	8325	350 MCM

8,7/15 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02070SR1037M63	3x25+3x16/3E	50,6	873,6	3570	1125	4
02070SR1037M64	3x35+3x16/3E	55,0	1161,6	4270	1575	2
02070SR1037M65	3x50+3x25/3E	57,9	1680,0	4930	2250	1
02070SR1037M66	3x70+3x35/3E	65,1	2352,0	6430	3150	2/0
02070SR1037M67	3x95+3x50/3E	68,9	3216,0	7620	4275	3/0
02070SR1037M68	3x120+3x70/3E	72,6	4128,0	8890	5400	4/0
02070SR1037M69	3x150+3x70/3E	78,5	4992,0	10420	6750	250 MCM
02070SR1037M70	3x185+3x95/3E	82,3	6240,0	11990	8325	350 MCM

FLEXIDRUM® MEDIUM (N)TSCGEWÖU WATER.../3E

From 1,8/3 Kv up to 18/30 Kv, with core copper screen

12/20 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02070UR1037M63	3x25+3x16/3E	56,6	873,6	4290	1125	4
02070UR1037M64	3x35+3x16/3E	59,2	1161,6	4800	1575	2
02070UR1037M65	3x50+3x25/3E	62,1	1680	5530	2250	1
02070UR1037M66	3x70+3x35/3E	69,3	2352	7105	3150	2/0
02070UR1037M67	3x95+3x50/3E	73,4	3216	8290	4275	3/0
02070UR1037M68	3x120+3x70/3E	78,6	4128	9920	5400	4/0
02070UR1037M69	3x150+3x70/3E	82,7	4992	11187	6750	250 MCM
02070UR1037M70	3x185+3x95/3E	86,5	6240	12770	8325	350 MCM

14/25 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02070WR1037M63	3x25+3x16/3E	62,3	873,6	5030	1125	4
02070WR1037M64	3x35+3x16/3E	66,4	1161,6	5828	1575	2
02070WR1037M65	3x50+3x25/3E	69,5	1680	6612	2250	1
02070WR1037M66	3x70+3x35/3E	74,8	2352	7978	3150	2/0
02070WR1037M67	3x95+3x50/3E	80,6	3216	9550	4275	3/0
02070WR1037M68	3x120+3x70/3E	84,1	4128	10925	5400	4/0
02070WR1037M69	3x150+3x70/3E	89,8	4992	12578	6750	250 MCM
02070WR1037M70	3x185+3x95/3E	93,9	6240	14275	8325	350 MCM

18/30 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02070XR1037M63	3x25+3x16/3E	69	873,6	6045	1125	4
02070XR1037M64	3x35+3x16/3E	71,5	1161,6	6610	1575	2
02070XR1037M65	3x50+3x25/3E	74,6	1680	7418	2250	1
02070XR1037M66	3x70+3x35/3E	81,7	2352	9189	3150	2/0
02070XR1037M67	3x95+3x50/3E	85,5	3216	10505	4275	3/0
02070XR1037M68	3x120+3x70/3E	91,2	4128	12280	5400	4/0
02070XR1037M69	3x150+3x70/3E	94,6	4992	13638	6750	250 MCM
02070XR1037M70	3x185+3x95/3E	100,8	6240	15780	8325	350 MCM

Other dimensions and colors available on request.

FLEXIDRUM® MEDIUM RS (N)TSCGEWÖU

From 3,6/6 Kv up to 12/20 Kv, on request 14/25 kV


Suitable for reeling application


Suitable for festoon application

Construction:

Conductor:	flexible red copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Inner semi-conductive layer:	semi-conducting compound
Insulation:	rubber EPR compound type 3GI3
Outer semi-conductive layer:	semi-conducting compound
Earth conductor:	flexible red copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Earth semi-conductive layer:	semi-conducting compound
Cores color:	**Power:** natural color with black semi-conducting compound **Earth:** black semi-contucting compound
Stranding:	phase units laid up with earth-conductors in interstices
Inner sheath:	rubber PCP compound
Outer sheath:	red (similar to RAL 3000), special PCP compound

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Water resistance acc. to:
HD 22.16

Technical data:

Nominal voltage:	U/oU 3,6/6 kV, U/oU 6/10 kV, U/oU 8,7/15 kV, U/oU 12/20 kV On request 14/25 kV
Max. operating voltage.:	U/oU 3,6/6 kV = 5,4 kV U/oU 6/10 kV = 12 kV U/oU 8,7/15 kV = 18 kV U/oU 12/20 kV = 24 kV U/oU 14/25 kV = 30 kV
Test voltage:	U/oU 3,6/6 kV = 11 kV U/oU 6/10 kV = 17 kV U/oU 8,7/15 kV = 24 kV U/oU 12/20 kV = 29 kV U/oU 14/25 kV = 36 kV
Temperature range:	
Fixed laying:	-40°C up to +80°C
Flexible installation:	-30°C up to +80°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Min. bending radius:	
Fixed laying:	6 x D
On drums:	12 x D
On deflection pulleys:	15 x D
Free movement:	12 x D
Min. distance for change of direction:	20 x D
Current carrying capacity:	acc. to DIN VDE 0298-4
Tensile strenght:	20 N/mm²
Max speed (main application):	60 m/min

Features:

mining excavator!

outdoor/indoor use

UV, ozone, and moisture resistant

double layer

small outer diameter and light weight

possible version with antitwisting protection

possible version with tinned Cu-conductors

cold version -45°C possible

GOST-R WUG and others approvals on request

for SPEED and MINIMUM BENDING RADIUS see pages from 2 to 8 of catalogue

RoHS approval

RoHS

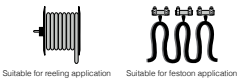
Applications:

power supply cable for use in water: connection to dredgers, pumps, ect.

suitable for application where it is deflected in one level only, because it's without anti-twisting protection.

FLEXIDRUM® MEDIUM RS (N)TSCGEWÖU

From 3,6/6 Kv up to 12/20 Kv, on request 14/25 kV



Uo/U (Um) 3,6/6 (7,2) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02090MR1037M63	3x25+3x25/3	40,3	960	2410	1500	4
02090MR1037M64	3x35+3x25/3	43	1248	2935	2100	2
02090MR1037M65	3x50+3x25/3	45,8	1680	3455	3000	1
02090MR1037M66	3x70+3x35/3	49,8	2352	4360	4200	2/0
02090MR1037M67	3x95+3x50/3	53,7	3216	5365	5700	3/0
02090MR1037M68	3x120+3x70/3	58	4128	6746	7200	4/0
02090MR1037M69	3x150+3x70/3	62,5	4992	7743	9000	250 MCM
02090MR1037M70	3x185+3x95/3	65,6	6240	9169	11100	350 MCM
02090MR1037M71	3x240+3x120/3	74	8064	11980	14400	450 MCM

Uo/U (Um) 6/10 (12) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02090QR1037M63	3x25+3x25/3	42	960	2560	1500	4
02090QR1037M64	3x35+3x25/3	44,8	1248	3111	2100	2
02090QR1037M65	3x50+3x25/3	47,6	1680	3648	3000	1
02090QR1037M66	3x70+3x35/3	51,7	2352	4566	4200	2/0
02090QR1037M67	3x95+3x50/3	55,5	3216	5558	5700	3/0
02090QR1037M68	3x120+3x70/3	59,8	4128	6950	7200	4/0
02090QR1037M69	3x150+3x70/3	64,2	4992	7972	9000	250 MCM
02090QR1037M70	3x185+3x95/3	67,4	6240	9425	11100	350 MCM
02090QR1037M71	3x240+3x120/3	75,2	8064	12175	14400	450 MCM

Uo/U (Um) 8,7/15 (18) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02090SR1037M63	3x25+3x25/3	45,5	960	2880	1500	4
02090SR1037M64	3x35+3x25/3	48,1	1248	3326	2100	2
02090SR1037M65	3x50+3x25/3	50,9	1680	3400	3000	1
02090SR1037M66	3x70+3x35/3	55,1	2352	4935	4200	2/0
02090SR1037M67	3x95+3x50/3	60,2	3216	5970	5700	3/0
02090SR1037M68	3x120+3x70/3	63,7	4128	7430	7200	4/0
02090SR1037M69	3x150+3x70/3	67,8	4992	8444	9000	250 MCM
02090SR1037M70	3x185+3x95/3	72,2	6240	10165	11100	350 MCM
02090SR1037M71	3x240+3x120/3	77,8	8064	12595	14400	450 MCM

Uo/U (Um) 12/20 (24) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02090UR1037M63	3x25+3x25/3	50,2	960	3360	1500	4
02090UR1037M64	3x35+3x25/3	53	1248	3946	2100	2
02090UR1037M65	3x50+3x25/3	55,8	1680	4533	3000	1
02090UR1037M66	3x70+3x35/3	59,8	2352	5515	4200	2/0
02090UR1037M67	3x95+3x50/3	64,1	3216	6639	5700	3/0
02090UR1037M68	3x120+3x70/3	68,4	4128	8098	7200	4/0
02090UR1037M69	3x150+3x70/3	73,9	4992	9375	9000	250 MCM
02090UR1037M70	3x185+3x95/3	76,9	6240	10865	11100	350 MCM
02090UR1037M71	3x240+3x120/3	-	8064	13550	14400	450 MCM

Other dimensions and colors available on request.

FLEXIDRUM® MEDIUM RS (N)TSCGEWÖU

From 3,6/6 Kv up to 12/20 Kv, on request 14/25 kV


Suitable for reeling application


Suitable for festoon application

	Max resistance		Reactance at 50 Hz for nominal voltage			
Nominal cross section mm²	D.C. at 20°C Ohm/km	A.C. at 90°C Ohm/km	3,6/6 Ohm/km	6/10 Ohm/km	8,7/15 Ohm/km	12/20 Ohm/km
25	0,780	0,995	0,107	0,111	0,117	0,125
35	0,554	0,707	0,075	0,104	0,110	0,117
50	0,386	0,493	0,075	0,100	0,105	0,112
70	0,272	0,348	0,073	0,094	0,099	0,106
95	0,206	0,264	0,072	0,091	0,095	0,101
120	0,161	0,207	0,071	0,087	0,091	0,097
150	0,129	0,167	0,071	0,085	0,088	0,093
185	0,106	0,139	0,072	0,083	0,087	0,091
240	0,0801	0,107	0,072	0,082	0,084	0,089

Correction factors for ambient temperature other than 30°C

°C	20	25	30	40	45	50	55
K	1,1	1,05	0,95	0,89	0,84	0,77	0,71

FLEXIDRUM® MEDIUM RS (N)TSCGEWÖU

From 3,6/6 Kv up to 14/25 Kv, with antitwisting protection


Suitable for reeling application


Suitable for festoon application

Construction:

Conductor:	flexible red copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Inner semi-conductive layer:	semi-conducting compound
Insulation:	rubber EPR compound type 3GI3
Outer semi-conductive layer:	semi-conducting compound
Earth conductor:	flexible red copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Earth semi-conductive layer:	semi-conducting compound
Cores color:	**Power:** natural color with black semi-conducting compound **Earth:** black semi-contucting compound
Stranding:	phase units laid up with earth-conductors in interstices
Inner sheath:	rubber PCP compound
Supporting screen:	anti-twisting protection of synthetic yarns
Outer sheath:	red (similar to RAL 3000), special PCP compound

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Water resistance acc. to:
HD 22.16

Technical data:

Nominal voltage:	U/oU 3,6/6 kV, U/oU 6/10 kV, UoU 8,7/15 kV, U/oU 12/20 kV U/oU 14/25 kV
Max. operating voltage.:	U/oU 3,6/6 kV = 5,4 kV U/oU 6/10 kV = 12 kV U/oU 8,7/15 kV = 18 kV U/oU 12/20 kV = 24 kV U/oU 14/25 kV = 30 kV
Test voltage:	U/oU 3,6/6 kV = 11 kV U/oU 6/10 kV = 17 kV U/oU 8,7/15 kV = 24 kV U/oU 12/20 kV = 29 kV U/oU 14/25 kV = 36 kV
Temperature range:	
Fixed laying:	-40°C up to +80°C
Flexible installation:	-30°C up to +80°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Min. bending radius:	
Fixed laying:	6 x D
On drums:	12 x D
On deflection pulleys:	15 x D
Free movement:	12 x D
Min. distance for change of direction:	20 x D
Current carrying capacity:	acc. to DIN VDE 0298-4
Tensile strenght:	20 N/mm²
Max speed (main application):	180 m/min
Max. torsion:	+/- 25°/m

Features:

mining excavator!

outdoor/indoor use

UV, ozone, and moisture resistant

double layer with-antitwisting reinforcement

small outer diameter and light weight

possible version without antitwisting protection

possible version with tinned Cu-conductors

cold version -45°C possible

GOST-R WUG and others approvals on request

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS approval

RoHS

Applications:

power supply cable for use in water:
connection to dredgers, pumps, ect.

suitable to operate with forced guidance systems with deflection on different levels and with reel axis in direction of travel.

FLEXIDRUM® MEDIUM RS (N)TSCGEWÖU

From 3,6/6 Kv up to 14/25 Kv, with antitwisting protection


Suitable for reeling application


Suitable for festoon application

Uo/U (Um) 3,6/6 (7,2) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02091MR1037M63	3x25+3x25/3	41,2	960	2535	1500	4
02091MR1037M64	3x35+3x25/3	43,7	1248	3025	2100	2
02091MR1037M65	3x50+3x25/3	46,6	1680	3560	3000	1
02091MR1037M66	3x70+3x35/3	50,7	2352	4480	4200	2/0
02091MR1037M67	3x95+3x50/3	54,7	3216	5478	5700	3/0
02091MR1037M68	3x120+3x70/3	58,9	4128	6875	7200	4/0
02091MR1037M69	3x150+3x70/3	63,4	4992	7920	9000	250 MCM
02091MR1037M70	3x185+3x95/3	66,5	6240	9335	11100	350 MCM
02091MR1037M71	3x240+3x120/3	74,8	8064	12140	14400	450 MCM

Uo/U (Um) 6/10 (12) kV

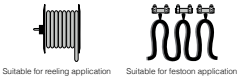
Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02091QR1037M63	3x25+3x25/3	42,8	960	2667	1500	4
02091QR1037M64	3x35+3x25/3	45,6	1248	3215	2100	2
02091QR1037M65	3x50+3x25/3	51,4	1680	3733	3000	1
02091QR1037M66	3x70+3x35/3	52,5	2352	4682	4200	2/0
02091QR1037M67	3x95+3x50/3	56,3	3216	5701	5700	3/0
02091QR1037M68	3x120+3x70/3	60,3	4128	7105	7200	4/0
02091QR1037M69	3x150+3x70/3	65,1	4992	8128	9000	250 MCM
02091QR1037M70	3x185+3x95/3	68,1	6240	9578	11100	350 MCM
02091QR1037M71	3x240+3x120/3	75,9	8064	12365	14400	450 MCM

Uo/U (Um) 8,7/15 (18) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02091SR1037M63	3x25+3x25/3	46,2	960	2987	1500	4
02091SR1037M64	3x35+3x25/3	48,9	1248	3530	2100	2
02091SR1037M65	3x50+3x25/3	51,7	1680	4121	3000	1
02091SR1037M66	3x70+3x35/3	55,8	2352	5080	4200	2/0
02091SR1037M67	3x95+3x50/3	59,7	3216	6146	5700	3/0
02091SR1037M68	3x120+3x70/3	64,7	4128	7590	7200	4/0
02091SR1037M69	3x150+3x70/3	68,5	4992	8605	9000	250 MCM
02091SR1037M70	3x185+3x95/3	72,9	6240	10305	11100	350 MCM
02091SR1037M71	3x240+3x120/3	78,6	8064	12730	14400	450 MCM

FLEXIDRUM® MEDIUM RS (N)TSCGEWÖU

From 3,6/6 Kv up to 14/25 Kv, with antitwisting protection



Uo/U (Um) 12/20 (24) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02091UR1037M63	3x25+3x25/3	50,7	960	3465	1500	4
02091UR1037M64	3x35+3x25/3	53,7	1248	4055	2100	2
02091UR1037M65	3x50+3x25/3	56,6	1680	4670	3000	1
02091UR1037M66	3x70+3x35/3	60,6	2352	5685	4200	2/0
02091UR1037M67	3x95+3x50/3	64,9	3216	6804	5700	3/0
02091UR1037M68	3x120+3x70/3	69,2	4128	8268	7200	4/0
02091UR1037M69	3x150+3x70/3	74,5	4992	9573	9000	250 MCM
02091UR1037M70	3x185+3x95/3	78,1	6240	11060	11100	350 MCM
02091UR1037M71	3x240+3x120/3	-	8064	13215	14400	450 MCM

Uo/U (Um) 14/25 (30) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02091WR1037M63	3x25+3x25/3	51,6	960	3375	1500	4
02091WR1037M64	3x35+3x25/3	55,7	1248	4038	2100	2
02091WR1037M65	3x50+3x25/3	59,4	1680	4810	3000	1
02091WR1037M66	3x70+3x35/3	63	2352	5838	4200	2/0
02091WR1037M67	3x95+3x50/3	68,6	3216	7290	5700	3/0
02091WR1037M68	3x120+3x70/3	72,3	4128	8510	7200	4/0
02091WR1037M69	3x150+3x70/3	77,7	4992	10075	9000	250 MCM
02091WR1037M70	3x185+3x95/3	81,5	6240	11620	11100	350 MCM
02091WR1037M71	3x240+3x120/3	89,4	8064	14675	14400	450 MCM

Other dimensions and colors available on request.

	Max resistance		Reactance at 50 Hz for nominal voltage			
Nominal cross section mm²	D.C. at 20°C Ohm/km	A.C. at 90°C Ohm/km	3,6/6 Ohm/km	6/10 Ohm/km	8,7/15 Ohm/km	12/20 Ohm/km
25	0,780	0,995	0,107	0,111	0,117	0,125
35	0,554	0,707	0,075	0,104	0,110	0,117
50	0,386	0,493	0,075	0,100	0,105	0,112
70	0,272	0,348	0,073	0,094	0,099	0,106
95	0,206	0,264	0,072	0,091	0,095	0,101
120	0,161	0,207	0,071	0,087	0,091	0,097
150	0,129	0,167	0,071	0,085	0,088	0,093
185	0,106	0,139	0,072	0,083	0,087	0,091
240	0,0801	0,107	0,072	0,082	0,084	0,089

Correction factors for ambient temperature other than 30°C

°C	20	25	30	40	45	50	55
K	1,1	1,05	0,95	0,89	0,84	0,77	0,71

FLEXIDRUM® MEDIUM RS-T (N)TSCGEWÖU

From 1,8/3 Kv up to 18/30 Kv, with antitwisting protection


Suitable for reeling application


Suitable for festoon application

Construction:

Conductor:	flexible tinned copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Inner semi-conductive layer:	semi-conducting compound
Insulation:	rubber EPR compound type 3GI3
Outer semi-conductive layer:	semi-conducting compound
Earth conductor:	flexible tinned copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Earth semi-conductive layer:	semi-conducting compound
Cores color:	**Power:** natural color with black semi-conducting compound **Earth:** black semi-contucting compound
Wrapping:	tear-resistant tape
Inner sheath:	rubber PCP type 5GM5
Supporting screen:	anti-twisting protection of synthetic yarns
Outer sheath:	black (similar to RAL 9005), special PCP type 5GM5

Technical data:

Nominal voltage:	U/oU 1,8/3 kV, U/oU 3,6/6 kV, U/oU 6/10 kV, U/oU 8,7/15 kV, U/oU 12/20 kV, U/oU 18/30 kV
Max. operating voltage in A.C.:	U/oU 1,8/3 kV = 2,1/3,6 kV U/oU 3,6/6 kV = 4,2/7,2 kV U/oU 6/10 kV = 6,9/12 kV U/oU 8,7/15 kV = 10,4/18 kV U/oU 12/20 kV = 13,9/24 kV U/oU 18/30 kV = 20,8/36 kV
Max. operating voltage in D.C.:	U/oU 1,8/3 kV = 2,7/5,4 kV U/oU 3,6/6 kV = 5,4/10 kV U/oU 6/10 kV = 9/18 kV U/oU 8,7/15 kV = 13,5/27 kV U/oU 12/20 kV = 18/36 kV U/oU 18/30 kV = 27/54 kV
Test voltage:	U/oU 3,6/6 kV = 6 kV U/oU 3,6/6 kV = 11 kV U/oU 6/10 kV = 17 kV U/oU 8,7/15 kV = 24 kV U/oU 12/20 kV = 29 kV U/oU 18/30 kV = 43 kV
Temperature range:	
Fixed laying:	-40°C up to +80°C
Flexible installation:	-20°C up to +60°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Min. bending radius:	acc. to DIN VDE 0298, part 3
Current carrying capacity:	acc. to DIN VDE 0298-4
Tensile strenght:	up to 15 N/mm²
Max speed (main application):	240 m/min
Max. torsion:	+/- 100°/m

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Features:

mining excavator!

outdoor/indoor use

UV, ozone, and moisture resistant

water resistant: very good

GOST-R WUG and others approvals on request

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS approval

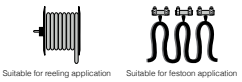
RoHS

Applications:

suitable for connections to the excavators in open cast mines are subjected to extremely high mechanical abrasion and tear resistant.

FLEXIDRUM® MEDIUM RS-T (N)TSCGEWÖU

From 1,8/3 Kv up to 18/30 Kv, with antitwisting protection



Uo/U (Um) 1,8/3 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02100K71037M63	3x25+3x25/3	37,3	960	2460	1125	4
02100K71037M64	3x35+3x25/3	41,2	1248	3070	1575	2
02100K71037M65	3x50+3x25/3	44,8	1680	3738	2250	1
02100K71037M66	3x70+3x35/3	48,4	2352	4701	6150	2/0
02100K71037M67	3x95+3x50/3	56,7	3216	6202	4275	3/0
02100K71037M68	3x120+3x70/3	60,5	4128	7426	5400	4/0
02100K71037M69	3x150+3x70/3	65,9	4992	8893	6750	250 MCM
02100K71037M70	3x185+3x95/3	70	6240	10340	8325	350 MCM

Uo/U (Um) 3,6/6 kV

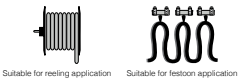
Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02100M71037M63	3x25+3x25/3	41,8	960	2580	1125	4
02100M71037M64	3x35+3x25/3	44,2	1248	3045	1575	2
02100M71037M65	3x50+3x25/3	47,4	1680	3675	2250	1
02100M71037M66	3x70+3x35/3	54,3	2352	4952	6150	2/0
02100M71037M67	3x95+3x50/3	57,9	3216	5940	4275	3/0
02100M71037M68	3x120+3x70/3	61,2	4128	7212	5400	4/0
02100M71037M69	3x150+3x70/3	66,6	4992	8620	6750	250 MCM
02100M71037M70	3x185+3x95/3	70,5	6240	10030	8325	350 MCM

Uo/U (Um) 6/10 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02100Q71037M63	3x25+3x25/3	43,5	960	2730	1125	4
02100Q71037M64	3x35+3x25/3	45,5	1248	3215	1575	2
02100Q71037M65	3x50+3x25/3	50,1	1680	3835	2250	1
02100Q71037M66	3x70+3x35/3	56	2352	5125	3150	2/0
02100Q71037M67	3x95+3x50/3	59,7	3216	6130	4275	3/0
02100Q71037M68	3x120+3x70/3	64,9	4128	7710	5400	4/0
02100Q71037M69	3x150+3x70/3	67,9	4992	8855	6750	250 MCM
02100Q71037M70	3x185+3x95/3	72,2	6240	10265	8352	350 MCM

FLEXIDRUM® MEDIUM RS-T (N)TSCGEWÖU

From 1,8/3 Kv up to 18/30 Kv, with antitwisting protection



Uo/U (Um) 8,7/15 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02100S71037M63	3x25+3x25/3	48,1	960	3223	1125	4
02100S71037M64	3x35+3x25/3	52,5	1248	3915	1575	2
02100S71037M65	3x50+3x25/3	55,6	1680	4600	2250	1
02100S71037M66	3x70+3x35/3	60,7	2352	5773	3150	2/0
02100S71037M67	3x95+3x50/3	66,2	3216	7268	4275	3/0
02100S71037M68	3x120+3x70/3	69,4	4128	8435	5400	4/0
02100S71037M69	3x150+3x70/3	73,1	4992	9632	6750	250 MCM
02100S71037M70	3x185+3x95/3	78,7	6240	11450	8352	350 MCM

Uo/U (Um) 12/20 kV

* A protective earth conductor design ... 50/3 is also possible for application acc. to DIN VDE 0168

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02100U71037M63*	3x25+3x25/3	54,1	960	3930	1125	4
02100U71037M64*	3x35+3x25/3	56,6	1248	4435	1575	2
02100U71037M65*	3x50+3x25/3	59,8	1680	5175	2250	1
02100U71037M66*	3x70+3x35/3	66,7	2352	6620	3150	2/0
02100U71037M67	3x95+3x50/3	70,3	3216	7930	4275	3/0
02100U71037M68	3x120+3x70/3	73,8	4128	9140	5400	4/0
02100U71037M69	3x150+3x70/3	79,2	4992	10700	6750	250 MCM
02100U71037M70	3x185+3x95/3	82,9	6240	12230	8352	350 MCM

Uo/U (Um) 18/30 kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02100X71037M63*	3x25+3x25/3	67,3	960	6670	1125	4
02100X71037M64*	3x35+3x25/3	73,2	1248	7370	1575	2
02100X71037M65*	3x50+3x25/3	74,5	1680	8455	2250	1
02100X71037M66*	3x70+3x35/3	77,7	2352	9670	3150	2/0
02100X71037M67	3x95+3x50/3	82,1	3216	10950	4275	3/0
02100X71037M68	3x120+3x70/3	87,9	4128	12812	5400	4/0
02100X71037M69	3x150+3x70/3	91,6	4992	14230	6750	250 MCM
02100X71037M70	3x185+3x95/3	97,5	6240	16370	8352	350 MCM

Other dimensions and colors available on request.

FLEXIDRUM® MEDIUM SHD GC

From 2 Kv up to 15 Kv

Construction:

Power conductor:	flexible tinned copper conductor, acc. to ASTM B-172
Inner semi-conductive layer:	semi-conducting compound
Insulation:	rubber EPR compound
Power screen:	tinned copper braid with overall colored nylon and semi-conducting compound (non-conducting for 2 and 5 kV)
Outer semi-conductive layer:	semi-conducting compound
Earth conductors:	two finely stranded tinned copper acc. to ASTM B-172 uninsulated
Monitoring conductor:	finely stranded tinned copper acc. to ASTM B-172
Monitoring insulation:	PP compound
Cores color:	**Power:** natural color with Polyamide braid black, white, red acc. to ICEA S-75-381 **Monitoring:** yellow semi-conducting compound acc. to ICEA S-75-381 Tab. 3-22
Outer sheath:	black (similar to RAL 9005), rubber CPE compound

Features:

others colour on request

mechanical and water protection

MSHA, CSA and other approvals on request

two Earth conductors are used giving a total cross sectional area equal to at least 60% of the power conductor

for MINIMUM BENDING RADIUS
see pages from 5 to 8 of catalogue

RoHS approval

Technical data:

Nominal voltage:	2 kV up to 15 kV
Temperature range:	
Flexible installation:	-50°C up to +90°C
Min. bending radius:	8 x D

Applications:

FLEXIDRUM® MEDIUM cables are designed to provide safe, reliable performance on cable reelers
and festoons at temperatures from -50°C to +50°C
at speed up to 750 feet/minute.
These cables are designed for use on gantry cranes,stacker/ reclaimers and other equipment.

FLEXIDRUM® MEDIUM SHD GC

From 2 Kv up to 15 Kv

2 kV POWER GROUND/MONITORING

Part no.	AWG no.*)	AWG no.*) Kcmil	Nominal outside diameter (In) ± 10%	Weight approx. lbs. x 1000 ft	Maximum tensile load (lbs)
02110170037A06	6	10/10	1,29	1160	-
02110170037A04	4	8/10	1,4	1490	293
02110170037A02	2	6/10	1,59	2000	466
02110170037A01	1	5/8	1,76	2450	587
02110170037A1C	1/0	4/8	1,86	2840	741
02110170037A2C	2/0	3/8	2	3400	934
02110170037A3C	3/0	2/8	2,13	3680	1178
02110170037A4C	4/0	1/8	2,31	4860	1178
02110170037A5C	250 MCM	1/0 - 6	2,51	5950	1178
02110170037A7C	350 MCM	2/0 - 6	2,81	7400	1178
02110170037AAC	500 MCM	3/0 - 6	3,19	10100	1178

5 kV POWER GROUND/MONITORING

Part no.	AWG no.*)	AWG no.*) Kcmil	Nominal outside diameter (In) ± 10%	Weight approx. lbs. x 1000 ft	Maximum tensile load (lbs)
02110270037A06	6	10/8	1,56	1565	-
02110270037A04	4	8/8	1,7	1920	293
02110270037A02	2	6/8	1,9	2500	466
02110270037A01	1	5/8	1,95	2860	587
02110270037A1C	1/0	4/8	2	3390	741
02110270037A2C	2/0	3/8	2,2	3830	934
02110270037A3C	3/0	2/8	2,35	4418	1178
02110270037A4C	4/0	1/8	2,5	5300	1178
02110270037A5C	250 MCM	1/0 - 6	2,7	6450	1178
02110270037A7C	350 MCM	2/0 - 6	2,95	7880	1178
02110270037AAC	500 MCM	3/0 - 6	3,3	10440	1178

8 kV POWER GROUND/MONITORING

Part no.	AWG no.*)	AWG no.*) Kcmil	Nominal outside diameter (In) ± 10%	Weight approx. lbs. x 1000 ft	Maximum tensile load (lbs)
02110P70037A04	4	8/8	2	2200	293
02110P70037A02	2	6/8	2,2	2850	466
02110P70037A01	1	5/8	2,3	3370	587
02110P70037A1C	1/0	4/8	2,4	3600	741
02110P70037A2C	2/0	3/8	2,5	4200	934
02110P70037A3C	3/0	2/8	2,7	5100	1178
02110P70037A4C	4/0	1/8	2,6	5680	1178
02110P70037A5C	250 MCM	1/0 - 6	2,9	6750	1178
02110P70037A7C	350 MCM	2/0 - 6	3,3	8480	1178
02110P70037AAC	500 MCM	3/0 - 6	3,6	10720	1178

15 kV POWER GROUND/MONITORING

Part no.	AWG no.*)	AWG no.*) Kcmil	Nominal outside diameter (In) ± 10%	Weight approx. lbs. x 1000 ft	Maximum tensile load (lbs)
02110T70037A02	2	6/8	2,5	3520	466
02110T70037A01	1	5/8	2,6	4100	587
02110T70037A1C	1/0	4/8	2,7	4630	741
02110T70037A2C	2/0	3/8	2,9	4900	934
02110T70037A3C	3/0	2/8	3	5600	1178
02110T70037A4C	4/0	1/8	3,1	6830	1178

Other dimensions and colors available on request.

FLEXIDRUM® MEDIUM FLAT (N)TSFLCGCWOEUS

Reeling flat cables

Construction:

Conductor:	flexible tinned copper conductor Cl. 5, acc. to IEC 60228, DIN VDE 0295
Inner semi-conductive layer:	semi-conducting compound
Insulation:	rubber EPR special compound
Outer semi-conductive layer:	semi-conducting compound
Cores color:	**Power:** natural color with black semi-conducting compound **Earth:** black semi-contucting compound
Earth conductor screen:	tinned copper braid
Outer sheath:	red (similar to RAL 3000), special PCP compound

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Technical data:

Nominal voltage:	U/oU 3,6/6 kV up to 8,7/15 kV
Max. operating voltage in A.C. systems:	Um 1,2 x U
Max. operating voltage in A.C. systems:	Um 1,8 x U
Test voltage:	(acc. to DIN VDE 0250 part 813): 11 kV up to 24 kV in A.C. 27,5 kV up to 60 kV in D.C.
Temperature range:	
Fixed laying:	-50°C up to +80°C
Flexible installation:	-35°C up to +80°C
Max. temperature on conductor:	+ 90°C
Max. temperature in short circuit:	+ 250 °C
Min. bending radius:	acc. to DIN VDE 0298, part 3
Current carrying capacity:	acc. to DIN VDE 0298-4
Tensile strenght:	20 N/mm²

Features:

outdoor/indoor use

ozone and moisture resistant

reduced cable weight

small outer diameter

possible with integrated optical fiber

for MINIMUM BENDING RADIUS
see pages from 5 to 8 of catalogue

RoHS approval

RoHS

Applications:

Suitable to operate with forced guidance systems with deflection on different levels and with reel axis in direction of travel.

FLEXIDRUM® MEDIUM FLAT (N)TSFLCGCWOEUS

Reeling flat cables

Uo/U 3,6 (7,2) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02120MR1040M64	4x35	24x77 - 25x79	-	3600	2800	2
02120MR1049900	4x35/35+LWL	24x77 - 25x79	-	3600	2100	2
02120MR1040M65	4x50	26x83 - 27x85	-	4400	4000	1
02120MR1049901	3x50/50+LWL	26x83 - 27x85	-	4400	3000	0

Uo/U 6/10 (12) kV

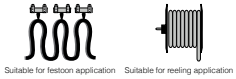
Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02120QR1040M64	4x35	26x78 - 27x80	-	3900	2800	1
02120QR1049902	3x35/35+LWL	26x78 - 27x80	-	3900	2100	1

Uo/U 8,7/15 (18) kV

Part no.	No. of cores x cross section n x mm²	Outer-Ø ca.mm ± 10%	Copper weight kg/km	Cable weight approx. kg/km	Tensile strenght N	AWG no.*)
02120SR1040M64	4x35	27x79 - 28x81	-	4200	2800	1
02120SR1049903	4x35/35+LWL	27x79 - 28x81	-	4200	2100	1
02120SR1039904	3x35+4x25/4E+6FO62,5/125	28,5x89	1460	4330	-	1

Other dimensions and colors available on request.

FLEXIDRUM® FIBER 770



Construction:

Optical fibers:	core ø: 50 µm, 62,5 µm, 9 µm cladding: 125 µm coating: 250 µm standard type: 62,5/125 (others on request)
Tubes:	Thermoplastic compound
Central unit:	high-tech yarns
Stranding:	fiber-optics around central unit 6-12-18 fiber-optics laying in 6 tubes (1,2 or 3 fibers per tube)
Supporting screen:	anti-twisting protection of synthetic yarns
Outer sheath:	black (similar to RAL 9005), rubber PCP type 5GM2

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Technical data:

Temperature range:	
Fixed laying:	-40°C up to +80°C
Flexible installation:	-30°C up to +60°C
Min. bending radius:	15 x D
Max torsion:	± 120°/m
Tensile strenght:	1200 N
Max transverse pressure:	300 N/cm
Max speed (main application):	240 m/min

Features:

UV resistant

oil and chemical resistance

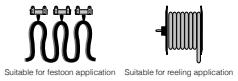
for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS approval

Part no.	No. of cores x cross-section n x mm²	No. of fibers x tube	Outer-Ø ca. mm ± 10%	Cable weight approx. kg/km	Tensile strength N
0109007F061F62	6G62,5/125 Micron	1	14	230	1200
0109007F061F52	6G50/125 Micron	1	14	230	1200
0109007F06AF09	6E9/125 Micron	1	14	230	1200
0109007F121F62	12G62,5/125 Micron	2	14	230	1200
0109007F121F52	12G50/125 Micron	2	14	230	1200
0109007F12AF09	12E9/125 Micron	2	14	230	1200
0109007F181F62	18G62,5/125 Micron	3	14	230	1200
0109007F181F52	18G50/125 Micron	3	14	230	1200
0109007F18AF09	18E9/125 Micron	3	14	230	1200

Other dimensions and colors available on request.

FLEXIDRUM® FIBER 780



Construction:

Optical fibers:	core ø: 50 µm, 62,5 µm, 9 µm cladding: 125 µm
Central unit:	aramide yarns
Stranding:	fiber-optics around central unit
Inner sheath:	GAALTHERM® 630
Screen:	fiber-glass braid
Outer sheath:	black (similar to RAL 9005), special PUR compound

Resistance:

Self-extinguishing and flame retardant acc. to:
DIN VDE 0482 part 265-2-1
EN 50265-2-1
IEC 60332-1-2

Oil resistance acc. to:
DIN VDE 0473 part 811-2-1
IEC EN 60811-2-1

Technical data:

Temperature range:	
Fixed laying:	-40°C up to +90°C
Flexible application:	-30°C up to +70°C
Min. bending radius:	
Fixed laying:	6 x D
Flexible installation:	10 x D
Max torsion:	± 120°/m
Tensile strenght:	2000 N
Max transverse pressure:	300 N/cm
Max speed (main application):	240 m/min

Features:

UV resistant

oil and chemical resistance

for SPEED and MINIMUM BENDING RADIUS
see pages from 2 to 8 of catalogue

RoHS approval

Part no.	No. of cores x cross-section n x mm²	Outer-Ø ca. mm ± 10%	Cable weight approx. kg/km	Tensile strength N
0111007F121F52	12G50/125 Micron	14	170	2000
0111007F121F62	12G62,5/125 Micron	14	170	2000
0111007F12AF09	12E9/125 Micron	14	170	2000
0111007F181F52	18G50/125 Micron	14	170	2000
0111007F181F62	18G62,5/125 Micron	14	170	2000
0111007F18AF09	18E9/125 Micron	14	170	2000
0111007F241F52	24G50/125 Micron	14	170	2000
0111007F241F62	24G62,5/125 Micron	14	170	2000
0111007F24AF09	24E9/125 Micron	14	170	2000

Other dimensions and colors available on request.