

Medium voltage reeling cable

TRATOSFLEX-ESDB-FO[®]



Application: Medium voltage reeling cable for high speed, high pull and torsion resistance. As main application for us in mono-spiral drums and spreader application. The cables can be manufactured to order or project-specific with E9/125, 50/125 or 62.5/125 fibres or their various combinations.

Construction and technical data:

Standard:	DIN VDE 0250-813 (with ref. to)
Conductor material:	tinned copper
Conductor construction:	Class 5 = flexible
Insulation:	HEPR
Electrical field control:	inner and outer semiconducting rubber layer
Arrangement of protective conductors:	split in the outer interstices
Material inner sheath:	rubber GM1b
Torsion protection:	polyester braid
Sheathing material:	rubber (CR) 5GM5
Colour of outer sheath:	red
Max. temperature at conductor, °C:	90 °C
Permitted outer cable temperature, fixed, °C:	-40 - +80 °C
Permitted outer cable temperature, moved, °C:	-30 - +80 °C
Bending radius, fixed installation:	6 x Ø
Bending radius, moving application:	12 x Ø
Operating speed monospiral (two ways), m/min.:	200 m/min.
Operating speed random, m/min.:	60 m/min.
Operating speed monospiral (one way), m/min.:	300 m/min.
operating speed spreader, m/min.:	200 m/min.
Operating speed tender system, m/min.:	60 m/min.



The products and information presented here are for technical calculation only. They are subject to technical progress and in no way represent the ability of shipment. Outer diameters are approximately.

TRATOSFLEX-ESDB® FO 3.6/6 KV**Nominal voltage U_o:** 3.6 kV**Nominal voltage U:** 6 kV**Maximum permitted operating voltage in** 7.2 kV**three-phase systems:****Test voltage:** 11 kV

part no.	part name	RI [Ohm/km]	Ø [mm]	Fzp [N]	Fzd [N]	Cu	G [kg]
052371	3X35 + 2X25/2 + 24 FO (9/125)	0.565	47.2	3000	4125	1248	3050
053966	3X25 + 2X25/2 + 24 FO (9/125)	0.795	45.5	3000	4125	960	2560
053967	3X25 + 2X25/2 + 24 FO (50/125)	0.795	45.5	3000	4125	960	2560
053968	3X25 + 2X25/2 + 24 FO (62.5/125)	0.795	45.5	3000	4125	960	2560
053429	3X35 + 2X25/2 + 12 FO (50/125)	0.565	47.2	3000	4125	1248	3050
053844	3X120 + 2X70/2 + 24 FO (9/125)	0.164	63	7500	10800	4128	6950
053845	3X120 + 2X70/2 + 24 FO (50/125)	0.164	63	7500	10800	4128	6950
053846	3X120 + 2X70/2 + 24 FO (62.5/125)	0.164	63	7500	10800	4128	6950
053427	3X95 + 2X50/2 + (5X2.5)C + 24 FO (62.5/125)	0.21	61.4	6500	8900	3336	6990

TRATOSFLEX® ESDB-FO 6/10 kV**Nominal voltage U_o:** 6 kV**Nominal voltage U:** 10 kV**Maximum permitted operating voltage in** 12 kV**three-phase systems:****Test voltage:** 17 kV

part no.	part name	RI [Ohm/km]	Ø [mm]	Fzp [N]	Fzd [N]	Cu	G [kg]
052589	3X25 + 2X25/2 + 24 FO (9/125)	0.795	45.5	3000	4125	960	2560
052064	3X25 + 2X25/2 + 24 FO (62.5/125)	0.795	42.5	3000	4125	960	2400
052217	3X25 + 2X25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.795	42.5	3000	4125	960	2790
052216	3X35 + 2X25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.565	48	3000	4125	1248	2960
053430	3X35 + 2X25/2 + 12 FO (50/125)	0.565	47.2	3000	4125	1248	3050
053341	3X50 + 2X25/2 + 24 FO (62.5/125)	0.393	50.2	3600	5250	1680	3520
052211	3X70 + 2X35/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.277	54.2	5000	7500	2352	4700
053343	3X50 + 3X50/3 + (18X2.5)C + 24 FO (9/125)	0.393	58	3600	5250	2304	4940
053176	3X35 + 3X35/3 + (18X2.5)C + 24 FO (9/125)	0.565	56.5	3000	4125	2030	4400
052225	3X95 + 2X50/2 + 24 FO (9/125)	0.21	59	6500	8900	3216	5840
053204	3X95 + 2X50/2 + 24 FO (62.5/125)	0.21	58.5	6500	8900	3216	5880
053515	3X95 + 50 + 3X(2X2.5)C + 24 FO (62.5/125)	0.21	63	6500	8900	3456	6230
054047	3X95 + 50 + 3X(4x2.5)C + 24 FO (9/125)	0.21	63	6500	8900	3600	6420
054048	3X95 + 50 + 3X(4x2.5)C + 24 FO (50/125)	0.21	63	6500	8900	3600	6420
054049	3X95 + 50 + 3X(4x2.5)C + 24 FO (62.5/125)	0.21	63	6500	8900	3600	6420
054030	3X120 + 02X70/2 + 12 FO (9/125)	0.164	63	7500	10800	4128	6950
054031	3X120 + 02X70/2 + 12 FO (50/125)	0.164	63	7500	10800	4128	6950
054032	3X120 + 02X70/2 + 12 FO (62.5/125)	0.164	63	7500	10800	4128	6950
053746	3X120 + 2X70/2 + 24 FO (9/125)	0.164	63	7500	10800	4128	6950
053747	3X120 + 2X70/2 + 24 FO (50/125)	0.164	63	7500	10800	4128	6950
053748	3X120 + 2X70/2 + 24 FO (62.5/125)	0.164	63	7500	10800	4128	6950
053848	3X185 + 2X95/2 + 24 FO (9/125)	0.108	73.3	11100	14000	6336	10300
053849	3X185 + 2X95/2 + 24 FO (50/125)	0.108	73.3	11100	14000	6336	10300
053850	3X185 + 2X95/2 + 24 FO (62.5/125)	0.108	73.3	11100	14000	6336	10300

TRATOSFLEX[®] ESDB-FO 8.7/15 kV**Nominal voltage U_o:** 8.7 kV**Nominal voltage U:** 15 kV**Maximum permitted operating voltage in** 18 kV**three-phase systems:****Test voltage:** 24 kV

part no.	part name	RI [Ohm/km]	Ø [mm]	Fzp [N]	Fzd [N]	Cu	G [kg]
053065	3X25 + 2X25/2 + 24 FO (E9/125)	0.795	47.5	3000	4125	960	2840
054106	3X25 + 2X25/2 + 24 FO 50/125	0.795	47.5	3000	4125	960	2840
052783	3X25 + 2X25/2 + 24 FO (62.5/125)	0.795	47.5	3000	4125	960	2840
053031	3X35 + 2X25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.565	46	3000	4125	1248	3310
052213	3X35 + 2X25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.565	50.1	3000	4125	1248	3250
053423	3X35 + 2X25/2 + 24 FO (E9/125)	0.565	46	3000	4125	1248	3250
053442	3X35 + 3X25/3 + (18X2.5)C + 24 FO (9/125)	0.565	56.5	3000	4125	2030	4170
054634	3X50 + 2X25/2 + 24 FO 62.5/125	0.393	52	3600	5250	1680	4120
052215	3X70 + 2X35/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.277	58	5000	7500	2352	5100

TRATOSFLEX[®] ESDB-FO 12/20 kV**Nominal voltage U_o:** 12 kV**Nominal voltage U:** 20 kV**Maximum permitted operating voltage in** 24 kV**three-phase systems:****Test voltage:** 29 kV

part no.	part name	RI [Ohm/km]	Ø [mm]	Fzp [N]	Fzd [N]	Cu	G [kg]
052470	3X25 + 2X25/2 + 12 FO (9/125) + 12 FO (62.5/125)	0.795	51	3000	4125	960	3180
052799	3X25 + 2X25/2 + 24 FO (9/125)	0.795	49.6	3000	4125	960	3180
053252	3X35 + 2X25/2 + 24G50/125	0.565	52.5	3000	4125	1248	3730
052451	3X25 + 2X25/2 + 24 FO (62.5/125)	0.795	51	3000	4125	960	3180
052546	3X35 + 2X25/2 + 12 FO (62.5/125)	0.565	54.5	3000	4125	1248	3800
053954	3X35+02X25/2 + 12 FO 9/125 + 12 FO 62.5/125	0.565	51.5	3000	4125	1248	3800
052541	3X35 + 2X25/2 + 24 FO (62.5/125)	0.565	54.5	3000	4125	1248	3800
052816	3X35 + 2X25/2 + 24 FO (62.5/125)	0.565	71	3000	4125	1248	6250
054622	3X50 + 2X25/2 + 24 FO (9/125)	0.393	59	3600	5250	1680	4470

TRATOSFLEX[®] ESDB-FO 14/25 kV**Nominal voltage U_o:** 14 kV**Nominal voltage U:** 25 kV**Maximum permitted operating voltage in** 30 kV**three-phase systems:****Test voltage:** 36 kV

part no.	part name	RI [Ohm/km]	Ø [mm]	Fzp [N]	Fzd [N]	Cu	G [kg]
054544	3X25 + 2X25/2 + 24 FO 9/125	0.795	55.4	3000	4125	1008	3970
054545	3X25 + 2X25/2 + 24 FO 50/125	0.795	55.4	3000	4125	1008	3970
054546	3X25 + 2x25/2 + 24 FO 62.5/125	0.795	55.4	3000	4125	1008	3970

RI	Conductor resistance
Ø	outer diameter approx.
Fzp	Tensile strength (permanent)
Fzd	Tensile strength (dynamic)
Cu	Copper weight (GER)
G	net weight per 1000