

# Medium voltage reeling cable

## TRATOSFLEX-ESDB<sup>®</sup>



**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.

### Construction and technical data:

<b>Standard:</b>	DIN VDE 0250-813 (with ref. to)
<b>Conductor material:</b>	tinned copper
<b>Conductor construction:</b>	Class 5 = flexible
<b>Insulation:</b>	basic EPR
<b>Electrical field control:</b>	inner and outer semiconducting rubber layer
<b>Arrangement of protective conductors:</b>	split in the outer interstices
<b>Material inner sheath:</b>	rubber GM1b
<b>Torsion protection:</b>	polyester braid
<b>Sheathing material:</b>	rubber (CR) 5GM5
<b>Max. temperature at conductor, °C:</b>	90 °C
<b>Permitted outer cable temperature, fixed, °C:</b>	-40 - +80 °C
<b>Permitted outer cable temperature, moved, °C:</b>	-30 - +80 °C
<b>Bending radius, fixed installation:</b>	6 x Ø
<b>Bending radius, moving application:</b>	12 x Ø
<b>Operating speed monospiral (two ways), m/min.:</b>	200 m/min.
<b>Operating speed random, m/min.:</b>	60 m/min.
<b>Operating speed monospiral (one way), m/min.:</b>	300 m/min.
<b>operating speed spreader, m/min.:</b>	200 m/min.
<b>Operating speed tender system, m/min.:</b>	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<sup>®</sup> 3.6/6 kV****Nominal voltage U<sub>o</sub>:** 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]
052469	03X35 + 3X10	0.565	47.2	3000	4125	1248	3050
053548	03X50 + 03X10	0.393	50.2	3600	5250	1728	3520
052428	03X70 + 3X16	0.277	54.2	5000	7500	2480	4950
052498	03X95 + 3X16	0.21	58	6500	8900	3216	5780
052499	03X185 + 3X35	0.108	73.5			6336	10080

**TRATOSFLEX-ESDB<sup>®</sup> 6/10 kV****Nominal voltage U<sub>o</sub>:** 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]
052012	03X50 + 3X10	0.393	49.2	3600	5250	1728	3720
054248	03X95 + 3X16	0.21	57	6500	8900	3216	5730
053279	03x70 + 03x16	0.277	54.2	5000	7500	2480	4700
052992	03X240 + 3X120/3	0.0817	78.5			8064	12120

**TRATOSFLEX-ESDB<sup>®</sup> 8.7/15 kV****Nominal voltage U<sub>o</sub>:** 8.7 kV**Nominal voltage U:** 15 kV**Maximum permitted operating voltage in** 18 kV**three-phase systems:****Test voltage:** 18 kV

part no.	part name	RI [Ohm/km]	Ø [mm]	Fzp [N]	Fzd [N]	Cu	G [kg]
054103	03X25 + 3X10	0.795	47	3000	4125	1008	2750
053055	03X35 + 3X10	0.565	46	3000	4125	1296	3090
054274	03X150 + 3X25	0.132	73.5	9000	12000	5440	8600

**TRATOSFLEX-ESDB<sup>®</sup> 12/20 kV****Nominal voltage U<sub>o</sub>:** 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]
053379	03X25 + 03X10	0.795	51	3000	4125	1008	3060
051924	03X35 + 3X10	0.565	54.5	3000	4125	1296	3590
053749	03x70 + 3X16	0.277	68	5000	7500	2477	5490

part no.	part name	RI [Ohm/km]	Ø [mm]	Fzp [N]	Fzd [N]	Cu	G [kg]
051926	03X95 + 3X16	0.21	67.6	6500	8900	3216	6900

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