

# Flexible medium voltage cable for conveyor Protolon(M)<sup>®</sup> F-(N)TSCGEWOEU



DERZEIT KEIN BILD VERFÜGBAR. | NO IMAGE AVAILABLE.

**Application:** For laying alongside the conveyor belts (also for shiftable units) and on material handling equipment (even with continuous movement such as in cable booms or as connection between upper and lower car) and for connection of submersible pump units. Also suitable for use in dirty, salt, and brackish water at depths of up to 10 meters.

## Construction and technical data:

<b>Standard:</b>	DIN VDE 0250-813 (with ref. to)
<b>Conductor material:</b>	copper, bare
<b>Conductor construction:</b>	Class 5 = flexible
<b>Insulation:</b>	rubber (EPR) 3GI3
<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>	basic EPR
<b>Torsion:</b>	+/- 100 °/m
<b>Sheathing material:</b>	Gummi 5GM3
<b>Colour of outer sheath:</b>	red
<b>Flame-retardant:</b>	VDE 0482-332-1-2/IEC 60332-1-2
<b>UV-resistant:</b>	yes
<b>Oil-resistant:</b>	EN 60811-404
<b>For outdoor use:</b>	yes
<b>Max. temperature at conductor, °C:</b>	90 °C
<b>Max. short circuit temperature at conductor, °C:</b>	250 °C
<b>Permitted outer cable temperature, fixed, °C:</b>	-40 - +80 °C
<b>Permitted outer cable temperature, moved, °C:</b>	-25 - +60 °C
<b>Bending radius, fixed installation:</b>	6 x Ø
<b>Bending radius, moving application:</b>	10 x Ø
<b>Maximum tensile strength at the conductor:</b>	15 N/mm <sup>2</sup>



*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.*

Protolon(M)<sup>®</sup> F-(N)TSCGEWOU 3.6/6 kV

**Nominal voltage U<sub>o</sub>:** 3.6 kV  
**Nominal voltage U:** 6 kV  
**Maximum permitted operating voltage in three-phase systems:** 7.2 kV  
**Test voltage:** 11 kV

part no.	part name	RI [Ohm/km]	I <sub>bl</sub> [A]	I <sub>k</sub> [kA]	L <sub>b</sub> [mH/km]	Ø [mm]	F <sub>zp</sub> [N]	Cu	G [kg]
051557	3X120 + 3X70/3	0.161	352	17.46	0.26	57.1	5400	4128	6245

Protolon(M)<sup>®</sup> F-(N)TSCGEWOU 6/10 kV

**Nominal voltage U<sub>o</sub>:** 6 kV  
**Nominal voltage U:** 10 kV  
**Maximum permitted operating voltage in three-phase systems:** 12 kV  
**Test voltage:** 17 kV

part no.	part name	RI [Ohm/km]	I <sub>bl</sub> [A]	I <sub>k</sub> [kA]	L <sub>b</sub> [mH/km]	Ø [mm]	F <sub>zp</sub> [N]	Cu	G [kg]
054843	3X35 + 03X25/3	0.554	162	5.01	0.32	41.4	1575	1248	2680
051401	3X50 + 3X25/3	0.386	202	7.15	0.3	44.6	2250	1680	3226
051264	3X50 + 3X25/3	0.386	202	7.15	0.3	45.2	2250	1920	3580
052175	3X95 + 3X50/3	0.206	301	13.6	0.27	54.9	4275	3216	5440

RI	Conductor resistance
I <sub>bl</sub>	Ampacity in air (30 °C)
I <sub>k</sub>	Short-circuit current (1 s)
L <sub>b</sub>	Specific inductivity
Ø	outer diameter approx.
F <sub>zp</sub>	Tensile strength (permanent)
Cu	Copper weight (GER)
G	net weight per 1000