

# Flexible medium voltage cable Faber<sup>®</sup> TBM (N)TSCGECWHXOEU



**Application:** Flexible cable suitable for reeling drum of tunnel boring machines (TBM) and generally for tunnel application. Other applications have to be agreed with Faber Kabel, otherwise warranty may get lost.

Bending radius: acc. to DIN VDE 0298-3

## 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>	rubber 3GI3
<b>Electrical field control:</b>	inner and outer semiconducting rubber layer
<b>Pilot conductor:</b>	tinned copper conductors, rubber 3GI3, with semi-conductive layer, splitted into three parts in the outer interstices
<b>Arrangement of protective conductors:</b>	mixed braid of tinned copper wires and textile fibers over each core
<b>Material inner sheath:</b>	rubber GM1b
<b>Monitoring core:</b>	Copper wire over the inner sheath
<b>Torsion:</b>	+/- 25 °/m
<b>Sheathing material:</b>	special EVA based halogen free rubber compound
<b>Colour of outer sheath:</b>	red
<b>Flame-retardant:</b>	VDE 0482-332-1-2/IEC 60332-1-2
<b>Halogen-free:</b>	DIN EN 50267/IEC 60754
<b>UV-resistant:</b>	yes
<b>Oil-resistant:</b>	EN 60811-404
<b>Ozone-resistant:</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>	-20 - +60 °C
<b>Min. distance with S-type directional changes:</b>	20 x Ø
<b>Operating speed:</b>	30 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.

Max. tensile load

reeling application	15 N/mm <sup>2</sup>
TBM application	30 N/mm <sup>2</sup>

Faber<sup>®</sup> TBM (N)TSCGECWHXOEU 6/10 kV

<b>Nominal voltage U<sub>0</sub>:</b>	6 kV
<b>Nominal voltage U:</b>	10 kV
<b>Maximum permitted operating voltage in three-phase systems:</b>	12 kV
<b>Test voltage:</b>	17 kV

part no.	part name	RI [Ohm/km]	Ø [mm]	Cu	G [kg]
053591	03X50 + 3X25/3E + 3X2.5ST + 6 UEL KON	0.393	55.8	1893	4140

Faber<sup>®</sup> TBM (N)TSCGECWHXOEU 12/20 kV

<b>Nominal voltage U<sub>0</sub>:</b>	12 kV
<b>Nominal voltage U:</b>	20 kV
<b>Maximum permitted operating voltage in three-phase systems:</b>	24 kV
<b>Test voltage:</b>	29 kV

part no.	part name	RI [Ohm/km]	Ø [mm]	Cu	G [kg]
052930	3X35 + 3X25/3E + 3X2.5ST + 6 UEL KON	0.565	58.3	1491	4330
052592	3X50 + 3X25/3E + 3X2.5ST + 6 UEL KON	0.393	62	1936	5000
054823	3X120 + 3X70/3E + 3X2.5ST + 6 UEL KON		76.5	4496	8709

RI	Conductor resistance
Ø	outer diameter approx.
Cu	Copper weight (GER)
G	net weight per 1000