

# Flexible medium voltage cable

## Faber<sup>®</sup> TBM H (N)TSCGECWHXOEU



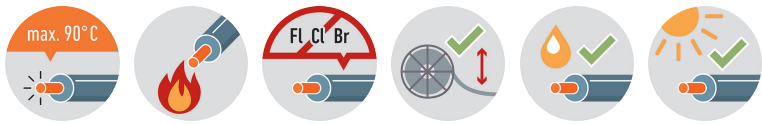
DERZEIT KEIN BILD VERFÜGBAR. | NO IMAGE AVAILABLE.

**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.

- Min. bedding radius: acc. to VDE 0298-3
- Max. current rating: acc. to VDE 0298-4,  $\geq 240 \text{ mm}^2$  IEC 60364-5-52

### Construction and technical data:

<b>Standard:</b>	DIN VDE 0250-1/605/813 (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>Pilot conductor:</b>	split 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>	200 °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>Bending radius, moving application:</b>	12 x Ø
<b>Maximum tensile strength at the conductor:</b>	15 N/mm <sup>2</sup>
<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.

**Faber<sup>®</sup> TBM H (N)TSCGECWHXÖU 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]	Ø [mm]	Cu	G [kg]
054669	3x50+3x25/3E+3x2.5ST+6 UEL KON RD	0.393	202	6.5	55	2073	4391
054693	3x240+3x120/3E+3x2.5ST+6 UEL KON RD	0.0817	538	30.7	81.6	9538	13699

**Faber<sup>®</sup> TBM H (N)TSCGECWHXOEU 8,7/15 kV**

**Nominal voltage U<sub>o</sub>:** 8.7 kV  
**Nominal voltage U:** 15 kV  
**Maximum permitted operating voltage in three-phase systems:** 18 kV  
**Test voltage:** 24 kV

part no.	part name	RI [Ohm/km]	I <sub>bl</sub> [A]	I <sub>k</sub> [kA]	Ø [mm]	Cu	G [kg]
054695	3x240+3x120/3E+3x2.5ST+6 UEL KON RD	0.0817	538	30.7	81.6	9538	13699

**Faber<sup>®</sup> TBM H (N)TSCGECWHXÖU 12/20 kV**

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

part no.	part name	RI [Ohm/km]	I <sub>bl</sub> [A]	I <sub>k</sub> [kA]	Ø [mm]	Cu	G [kg]
054670	3x35+3x25/3E+3x2,5ST+6 UEL KON RD	0.565	172	6.3	61	1638	4691

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