Flexible medium voltage cable
Faber® TBM (N)TSCGECWHOEU

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:

Standard:	DIN VDE 0250-813 (with ref. to)
Conductor material:	tinned copper
Conductor construction:	Class 5 = fine stranded - DIN EN IEC 60228 (VDE 0295)
Insulation:	rubber 3GI3
Electrical field control:	inner and outer semiconducting rubber layer
Pilot conductor:	tinned copper conductors, rubber 3GI3, with semi-conductive layer, splitted into three parts in the outer interstices
Arrangement of protective conductors:	mixed braid of tinned copper wires and textile fibers over each core
Material inner sheath:	rubber GM1b
Monitoring core:	Copper wire over the inner sheath
Torsion:	+/- 25 °/m
Sheathing material:	polyurethan
Colour of outer sheath:	red
Flame-retardant:	VDE 0482-332-1-2/IEC 60332-1-2
UV-resistant:	yes
Oil-resistant:	DIN EN 60811-404 / VDE 0473-811-404 / IEC 60811-404
Ozone-resistant:	yes
Max. temperature at conductor, °C:	90 °C
Max. short circuit temperature at conductor, °C:	250 °C
Permitted outer cable temperature, fixed, °C:	-40 - +80 °C
Permitted outer cable temperature, moved, °C:	-20 - +60 °C
Min. distance with S-type diretional changes:	20 x Ø
Operating speed:	30 m/min.

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Max. tensile load

reeling application	15 N/mm²
TBM application	30 N/mm²

Faber® TBM (N)TSCGECWHOEU 6/10 kV

Nominal voltage Uo: 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	Rl [Ohm/km]	Ø [mm]	Cu	G [kg]
052963	3X25 + 3X16/3E + 3X2,5ST + 6 UEL KON	0.795	48.4	1126	2839
052964	3X35 + 3X25/3E + 3X2,5ST + 6 UEL KON	0.565	50.6	1470	3297
052965	3X50 + 3X25/3E + 3X2,5ST + 6 UEL KON	0.393	53.9	1906	3903
053699	3X70 + 3X35/3E + 3X2.5ST + 6 UEL KON	0.277	61.4	2613	5270
054035	3X120 + 3X70/3E + 3x2.5ST + 6 UEL KON	0.164	69.9	4743	7355

Faber® TBM (N)TSCGECWHOEU 12/20 kV

Nominal voltage Uo: 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	Rl [Ohm/km]	Ø [mm]	Cu	G [kg]
052931	3X35 + 3X25/3E + 3X2.5ST + 6 UEL KON	0.565	58.3	1491	4235
052932	3X50 + 3X25/3E + 3X2.5ST + 6 UEL KON	0.393	62	1936	4940
052977	3X70 + 3X35/3E + 3X2,5ST + 6 UEL KON	0.277	67	2600	7320
053822	3X120 + 3X70/3E + 3X2.5ST + 6 UEL KON	0.164	72	4482	8300

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

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