

# Medium voltage reeling cable

## URSUS<sup>®</sup> MT FO KN PLUS



**Application:** Flexible medium voltage reeling cable with fiber optic wires, for high and extreme mechanical stress, e.g. torsional stress, deflection and high reeling speed. Other applications have to be agreed with Faber otherwise warranty may become void. The cables can be manufactured to order or project-specific with E9/125, 50/125 or 62.5/125 fibres.

- Min. bending radius: acc. to VDE 0298-3

- Max. current rating: acc. to VDE 0298-4

Remark on REACH: The following substances from the REACH candidate list are used for all products on this datasheet with a proportion of more than 0.1 %:

CAS 85535-85-9

### 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>Central filler:</b>	semiconductive compound on Kevlar <sup>®</sup> element
<b>Core wrapping:</b>	semiconductive tape
<b>Arrangement of protective conductors:</b>	arrange in the outer interstice
<b>Material inner sheath:</b>	rubber Gm1b/5GM5
<b>Torsion protection:</b>	polyester braid
<b>Torsion:</b>	+/- 25 °/m
<b>Sheathing material:</b>	rubber (CR) 5GM5
<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>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>°C:</b>	
<b>Permitted outer cable temperature, fixed, °C:</b>	-50 - +80 °C
<b>Permitted outer cable temperature, moved, °C:</b>	-30 - +80 °C
<b>Operating speed:</b>	300 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 strength 3xPhase + center element

nominal cross-section conductor	25 mm <sup>2</sup>	35 mm <sup>2</sup>	50 mm <sup>2</sup>	70 mm <sup>2</sup>	95mm <sup>2</sup>	120 mm <sup>2</sup>	150 mm <sup>2</sup>	185 mm <sup>2</sup>
Max. tensile strength	6250 N	7150 N	8500 N	10300 N	12550 N	14800 N	17500 N	20650 N

**URSUS<sup>®</sup>** MT FO KN PLUS 3.6/6 kV

**Nominal voltage U<sub>0</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	Number of fibres [n]	RI [Ohm/km]	Ø [mm]	Cu	G [kg]
052605	03x25+2x25/2 + 12E9/125	12	0.795	44.6	960	2930
052606	03x35+2x25/2 + 12E9/125	12	0.565	47.9	1248	3490
052607	03x50+2x25/2 + 12E9/125	12	0.393	51.2	1680	4170
052617	03x25+2x25/2 + 12G50/125	12	0.795	44.6	960	2930
052618	03x35+2x25/2 + 12G50/125	12	0.565	50	1248	3310
052619	03x50+2x25/2 + 12G50/125	12	0.393	51.2	1680	4170
052629	03x25+2x25/2 + 12G62.5/125	12	0.795	44.6	960	2930
052630	03x35+2x25/2 + 12G62.5/125	12	0.565	47.9	1248	3490
052631	03x50+2x25/2 + 12G62.5/125	12	0.393	51.2	1680	4170
052640	03x25+2x25/2 + 24E9/125	24	0.795	44.6	960	2930
052641	03x35+2x25/2 + 24E9/125	12	0.565	47.9	1248	3490
052642	03x50+2x25/2 + 24E9/125	24	0.393	51.2	1680	4170
052652	03x25+2x25/2 + 24G50/125	24	0.795	44.6	960	2930
052653	03x35+2x25/2 + 24G50/125	24	0.565	47.9	1248	3490
052654	03x50+2x25/2 + 24G50/125	24	0.393	51.2	1680	4170
052661	03x25+2x25/2 + 24G62.5/125	24	0.795	44.6	960	2930
052662	03x35+2x25/2 + 24G62.5/125	24	0.565	47.9	1248	3490
052663	03x50+2x25/2 + 24G62.5/125	24	0.393	51.2	1680	4170
053064	03x35+3x25/3+(12x2,5)C+12E9/125	12	0.565	52.6	1594	3730

**URSUS<sup>®</sup>** MT FO KN PLUS 6/10 kV

**Nominal voltage U<sub>0</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	Number of fibres [n]	RI [Ohm/km]	Ø [mm]	Cu	G [kg]
052608	03x25+2x25/2 + 12E9/125	12	0.795	44.6	960	2930
052609	03x35+2x25/2 + 12E9/125	12	0.565	47.9	1248	3490
053003	03X35+3X35/3 + (6X2,5)C + 12X FO (9/125)	12	0.565	55	1556	4080

part no.	part name	Number of fibres [n]	RI [Ohm/km]	Ø [mm]	Cu	G [kg]
052610	03x50+2x25/2 + 12E9/125	12	0.393	51.2	1680	4170
052620	03x25+2x25/2 + 12G50/125	12	0.795	44.6	960	2930
052621	03x35+2x25/2 + 12G50/125	12	0.565	50	1248	3310
052622	03x50+2x25/2 + 12G50/125	12	0.393	51.2	1680	4170
052632	03x25+2x25/2 + 12G62.5/125	12	0.795	44.6	960	2930
052633	03x35+2x25/2 + 12G62.5/125	12	0.565	47.9	1248	3490
052634	03x50+2x25/2 + 12G62.5/125	12	0.393	51.2	1680	4170
054905	03x95+2x50/2 + 12G9/125	12	0.21	65.7	3216	6480
052643	03x25+2x25/2 + 24E9/125	24	0.795	45.9	960	2930
052644	03x35+2x25/2 + 24E9/125	24	0.565	47.9	1248	3490
052645	03x50+2x25/2 + 24E9/125	24	0.393	51.2	1680	4170
052655	03x25+2x25/2 + 24G50/125	24	0.795	44.6	960	2930
052656	03x35+2x25/2 + 24G50/125	24	0.565	47.9	1248	3490
052657	03x50+2x25/2 + 24G50/125	24	0.393	51.2	1680	4170
052664	03x25+2x25/2 + 24G62.5/125	24	0.795	44.6	960	2930
052665	03x35+2x25/2 + 24G62.5/125	24	0.565	47.9	1248	3490
052666	03x50+2x25/2 + 24G62.5/125	24	0.393	51.2	1680	4170
053800	03x25+1x25 + ((24E9/125) + (24G50/125))	24	0.795	47.5	960	2850

### URSUS<sup>®</sup> MT FO KN PLUS 8.7/15 kV

**Nominal voltage U<sub>0</sub>:** 8.7 kV

**Nominal voltage U:** 15 kV

**Maximum permitted operating voltage in** 18 kV

**three-phase systems:**

**Test voltage:** 24 kV

part no.	part name	Number of fibres [n]	RI [Ohm/km]	Ø [mm]	Cu	G [kg]
052611	03x25+2x25/2 + 12E9/125	12	0.795	49.4	960	3450
052612	03x35+2x25/2 + 12E9/125	12	0.565	51.7	1248	3900
052613	03x50+2x25/2 + 12E9/125	12	0.393	54.9	1680	4580
052623	03x25+2x25/2 + 12G50/125	12	0.795	49.4	960	3450
052624	03x35+2x25/2 + 12G50/125	12	0.565	51.7	1248	3900
052625	03x50+2x25/2 + 12G50/125	12	0.393	54.9	1680	4580
052635	03x25+2x25/2 + 12G62.5/125	12	0.795	49.4	960	3450
052636	03x35+2x25/2 + 12G62.5/125	12	0.565	51.7	1248	3900
052637	03x50+2x25/2 + 12G62.5/125	12	0.393	54.9	1680	4580
052646	03x25+2x25/2 + 24E9/125	24	0.795	49.4	960	3450
052647	03x35+2x25/2 + 24E9/125	24	0.565	51.7	1248	3900
052648	03x50+2x25/2 + 24E9/125	24	0.393	54.9	1680	4580
052658	03x25+2x25/2 + 24G50/125	24	0.795	49.4	960	3450
052659	03x35+2x25/2 + 24G50/125	24	0.565	51.7	1248	3900
052660	03x50+2x25/2 + 24G50/125	24	0.393	54.9	1680	4580
052667	03x25+2x25/2 + 24G62.5/125	24	0.795	49.4	960	3450
052668	03x35+2x25/2 + 24G62.5/125	24	0.565	51.7	1248	3900
052669	03x50+2x25/2 + 24G62.5/125	24	0.393	54.9	1680	4580
052433	03X70+3X50/3 + (10X2.5)C + 12X FO (9/125)	12	0.277	66.5	2813	6130

**URSUS<sup>®</sup> MT FO KN PLUS 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	Number of fibres [n]	RI [Ohm/km]	Ø [mm]	Cu	G [kg]
052614	03x25+2x25/2 + 12E9/125	12	0.795	52.3	960	3730
052615	03x35+2x25/2 + 12E9/125	12	0.565	54.4	1248	4190
052616	03x50+2x25/2 + 12E9/125	12	0.393	59.3	1680	5110
052626	03x25+2x25/2 + 12G50/125	12	0.795	52.3	960	3730
052627	03x35+2x25/2 + 12G50/125	12	0.565	54.4	1248	4190
052673	03x50+2x25/2 + 12G50/125	12	0.393	59.3	1680	5110
052638	03x25+2x25/2 + 12G62.5/125	12	0.795	52.3	960	3730
052639	03x35+2x25/2 + 12G62.5/125	12	0.565	54.4	1248	4190
052628	03x50+2x25/2 + 12G62.5/125	12	0.393	59.3	1680	5110
053236	03x95+2x50/2 + 12G62.5/125	12	0.21	65.7	3216	6290
052649	03x25+2x25/2 + 24E9/125	24	0.795	52.3	960	3730
052650	03x35+2x25/2 + 24E9/125	24	0.565	54.4	1248	4190
052651	03x50+2x25/2 + 24E9/125	24	0.393	59.3	1680	5110
053253	03x35+2x25/2 + 24G50/125	24	0.565	56.8	1248	3940
052670	03x25+2x25/2 + 24G62.5/125	24	0.795	52.3	960	3730
052671	03x35+2x25/2 + 24G62.5/125	24	0.565	54.4	1248	4190
052672	03x50+2x25/2 + 24G62.5/125	24	0.393	59.3	1680	5110

**URSUS<sup>®</sup> MT FO KN PLUS 14/25 kV**

**Nominal voltage U<sub>o</sub>:** 14 kV  
**Nominal voltage U:** 25 kV  
**Maximum permitted operating voltage in three-phase systems:** 30 kV  
**Test voltage:** 36 kV

part no.	part name	Number of fibres [n]	RI [Ohm/km]	Ø [mm]	Cu	G [kg]
053009	03x25+2x25/2 + 12G62,5/125	12	0.795	55.4	960	3860

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