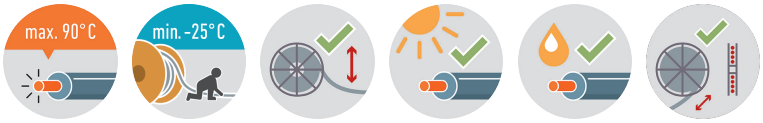
Flexible medium voltage cable PRYSMIAN Protolon® (SMK-200)-LWL (N)TSKCGEWOEU

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 carrying capacity: acc. to VDE 0298-4 table 15

Construction and technical data:

Standard:	DIN VDE 0250-813 (with ref. to)
Conductor material:	copper, bare
Conductor construction:	Class 5 = flexible
Insulation:	rubber (EPR) 3GI3
Electrical field control:	inner and outer semiconducting rubber layer
Arrangement of protective conductors:	split in the outer interstices
Material inner sheath:	Gummi 5GM3
Torsion protection:	synthetic braid
Sheathing material:	rubber 5GM5
Colour of outer sheath:	red
UV-resistant:	yes
Oil-resistant:	EN 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:	-25 - +80 °C
Operating speed monospiral (two ways), m/min.:	160 m/min.
Operating speed monospiral (one way), m/min.:	200 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.

Protolon® (SMK-200) -LWL (N)TSKCGEWOEU 3.6/6 kV

Nominal voltage Uo: 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	Rl [Ohm/km]	Ibl [A]	Ik [kA]	Ø [mm]	Fzp [N]	Fzd [N]	Cu	G [kg]
054373	03x120+2x70/2+1x(6E9/125)	0.161	352	17.16	67.1	7200	9000	4128	7400
054374	03x120+2x70/2+1x(6G50/125)	0.161	352	17.16	67.1	7200	9000	4128	7400
054375	03x120+2x70/2+1x(6G62.5/125)	0.161	352	17.16	67.1	7200	9000	4128	7400
053407	03x120+2x70/2+1x(12G62.5/125)	0.161	352	17.16	45.5	7200	9000	1018	2800

Protolon® (SMK-200) -LWL (N)TSKCGEWOEU 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]	Ibl [A]	Ik [kA]	Ø [mm]	Fzp [N]	Fzd [N]	Cu	G [kg]
054428	03x25+2x25/2+1x(24E9/125)	0.78	131	3.575	42.2	1500	1875	960	2506
054429	03x25+2x25/2+1x(24G50/125)	0.78	131	3.575	42.2	1500	1875	960	2506
054430	03x25+2x25/2+1x(24G62.5/125)	0.78	131	3.575	42.2	1500	1875	960	2506
054100	03x25+2x25/2+1x(12E9/125)+ 1x(12G62.5/125)	0.78	131	3.575	43.7	1500	1875	960	2737
053095	03x50+2x25/2+1x(12G62.5/125)	0.386	202	7.15	46.8	3000	3750	1680	3500
054705	03X35 + 2X25/2 + 1X(24E9/125)	0.554	162	5.01	44.2	2100	2625	1248	2834
054706	03X35 + 2X25/2 + 1X(24G50/125)	0.554	162	5.01	44.2	2100	2625	1248	2834
054707	03X35 + 2X25/2 + 1x(24G62.5/125)	0.554	162	5.01	44.2	2100	2625	1248	2834
054117	03x70+2x35/2+1x(18E9/125)	0.272	250	10.01	55.1	4200	5250	2470	5007
054118	03x70+2x35/2+1x(18G50/125)	0.272	250	10.01	55.1	4200	5250	2470	5007
054119	03x70+2x35/2+1x(18G62.5/125)	0.272	250	10.01	55.1	4200	5250	2470	5007
054337	03X95 + 2X50/2 + 1X(12 E9/125)	0.206	301	13.59	55.1	5700	7125	3216	5470
054338	03X95 + 2X50/2 + 1X(12G50/125)	0.206	301	13.59	55.1	5700	7125	3216	5470
054339	03X95 + 2X50/2 + 1X(12G62.5/125)	0.206	301	13.59	55.1	5700	7125	3216	5470
054834	03x150+2x70/2+1x(18G62.5/125)	0.129	404	21.45	65.8	9000	11250	4992	8032

Protolon® (SMK-200) -LWL (N)TSKCGEWOEU 8,7/15 kV

Nominal voltage Uo: 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	Rl [Ohm/km]	Ibl [A]	Ik [kA]	Ø [mm]	Fzp [N]	Fzd [N]	Cu	G [kg]
053984	3x25+2x25/2+1x(12E9/125)+ 1x(12G62.5/125)	0.78	139	3.575	44.5	1500	1875	960	2743
053096	3x50+2x25/2+1x(12G62.5/125)	0.386	215	7.15	48.5	3000	3750	1680	3640

Protolon® (SMK-200) -LWL (N)TSKCGEWOEU 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]	Ibl [A]	Ik [kA]	Ø [mm]	Fzp [N]	Fzd [N]	Cu	G [kg]
053097	3x35+2x25/2+1x(12G62.5/125)	0.554	172	5.01	48.3	2100	2625	1248	3260
054657	3X35 + 2X25/2 + 1X(24 E9/125)	0.554	172	5.01	48.3	2100	2625	1248	3271
053254	3x35+2x25/2+1x(24G50/125)	0.554	172	5.01	48.3	2100	2625	1248	3260
054658	3X35 + 2X25/2 + 1X(24G62.5/125)	0.554	172	5.01	48.3	2100	2625	1248	3260
054923	3x95+2x50/2+1x(12E9/125)	0.206	319	13.59	61.6	5700	7125	3216	6150
054224	3X120 + 2X70/2 + 1X(6E9/125)	0.161	371	17.16	67.1	7200	9000	4128	7400
054225	3X120 + 2X70/2 + 1X(6G50/125)	0.161	371	17.16	67.1	7200	9000	4128	7400
054226	3X120 + 2X70/2 + 1X(6G62.5/125)	0.161	371	17.16	67.1	7200	9000	4128	7400

Rl	Conductor resistance
Ibl	Ampacity in air (30 °C)
Ik	Short-circuit current (1 s)
Ø	outer diameter approx.
Fzp	Tensile strength (permanent)
Fzd	Tensile strength (dynamic)
Cu	Copper weight (GER)
G	net weight per 1000

