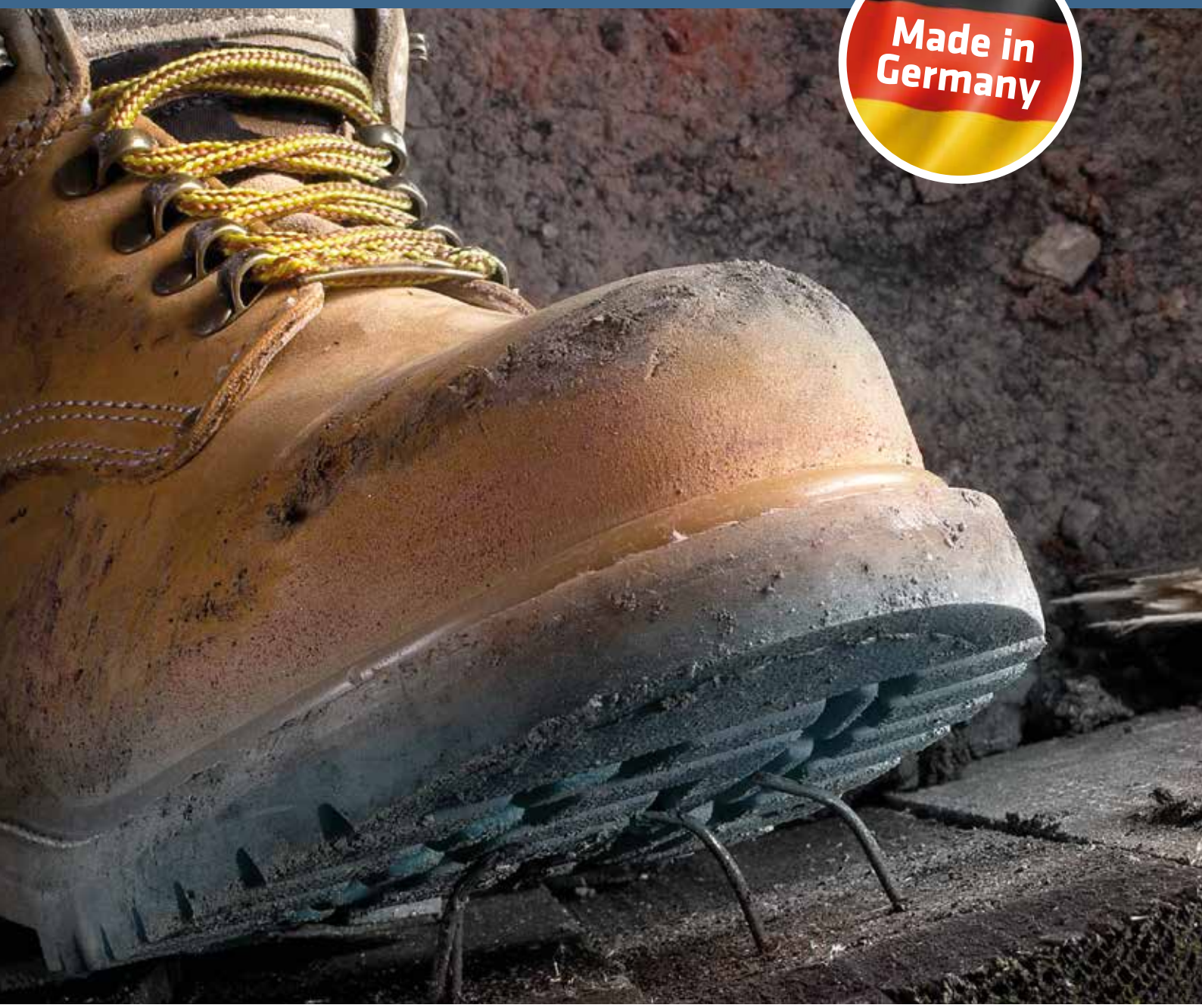
Tough as old boots.

New Protomont (MT) (N)SSHOEU is lighter and more flexible, yet as gritty as they get.



Prysmian Group

Heavy duty design

Excellent resistance qualities make the cable exceptionally suitable for demanding applications in rough environments such as mining and tunnel installations.

User friendly

As we have been able to optimise the cable diameter substantially as well as reducing the weight between 5 and 20 %, the cable is now much easier to handle and operate.

Water proof

Thanks to the high-quality rubber in the cable sheath Protomont (MT) (N)SSHOEU is submersible in water depths down to 10 meters.

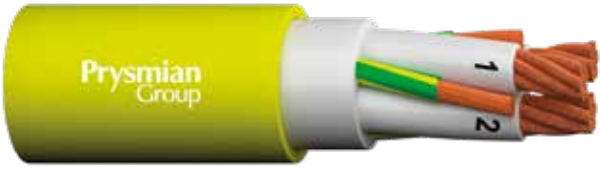
New Protomont (MT) (N)SSHOEU is lighter and more flexible, yet as gritty as they get.

With new and superior insulation, we've been able to reduce the diameter and weight of our Protomont (MT) (N)SSHOEU cable, making it the most flexible and high-efficient cable for really rough environments such as mines and tunnels. If needed the cable is even submersible to a depth of 10 meters. Whatever your pliability and heavy-duty demands, Protomont will fill the shoes.

PROTOMONT (MT) (N)SSHOEU

Application

Rubber-sheated flexible cables for mining and tunneling application, under heavy mechanical stress. Suitable for laying alongside conveyor belts and tunnel walls, on material handling equipment, e.g. as connection between upper and lower cars, and on movable equipment. The cables can be used indoor as well as outdoor, in explosion-hazard areas, in industry and in agriculture. The cables are water resistant up to 10 m water depth.



Available sections

The cable is available only in the round version:

- Single-core
- With two, three four and five conductors
- With three conductors + split or reduced earth
- Control core: up to 37 conductors

MAIN FEATURES

- Resistant to mechanical impact and abrasion
- Resistant to chemicals, oil and UV radiation
- Submersible to a water depth of 10 meters
- Flexible and easy to handle thanks to optimised diameter and reduced weight
- Longer lengths on drum means optimised transportation
- VDE approved

PROTOMONT (MT) (N)SSHOEU 0.6/1 kV					
Number of cores x cross section	Conductor diameter max. mm	Outer diameter min. mm	Outer diameter max. mm	Net weight (approx.) kg/km	Permissible tensile force max. N
PROTOMONT (MT) (N)SSHOEU-O					
1x16	5.2	9.5	11.1	230	240
1x25	6.4	11	12.6	335	335
1x35	7.5	12.3	13.9	435	525
1x50	9	14.5	16.5	615	750
1x70	11.1	16.4	18.4	812	1050
1x95	12.8	18.5	20.5	1060	1425
1x120	14.5	20.4	22.4	1300	1800
1x150	16.5	22.8	24.8	1600	2250
1x185	17.9	24.7	27.7	2020	2775
1x240	21.2	27.6	30.6	2548	3600
1x300	23.6	31.6	34.6	3200	4500
2x1.5	1.6	9.8	11.4	145	45
2x2.5	2	10.7	12.3	185	75
2x4	2.4	11.9	13.5	220	120
3x2.5	2	11.1	12.7	213	113
3x4	2.4	12.1	13.7	271	180
3x6	2.9	13.2	14.8	347	270
3x10	3.9	16.1	18.1	505	450
3x16	5.2	19	21	775	720
3x25	6.4	22.9	24.9	1160	1125
3x35	7.5	24.9	27.9	1500	1575
3x50	9	29.4	32.4	2190	2250
3x70	11.1	34.8	37.8	2930	3150
3x95	12.8	40.9	43.9	3720	4275
3x120	14.4	44.7	47.7	4850	5400
3x150	16.1	50	54	6130	6750
3x185	17.9	54.6	58.6	7290	8325
PROTOMONT (MT) (N)SSHOEU-J					
3x1.5	1.6	10.2	11.8	160	68
3x2.5	2	11.1	12.7	200	113
3x4	2.4	12.1	13.7	270	180
3x6	2.9	13.2	14.8	340	270
4x1.5	1.6	11	12.6	204	90
4x2.5	2	12	13.6	245	150
4x4	2.4	13	14.6	338	240
4x6	2.9	14.9	16.9	453	360
4x10	3.9	17.4	19.4	663	600
4x16	5.2	21.4	23.4	1020	960
4x25	6.4	24.5	27.5	1480	1500
4x35	7.5	28.4	31.4	1880	2100
4x50	9	33.6	36.6	2570	3000
4x70	10.6	39.5	42.5	3820	4200
4x95	12.8	44.8	47.8	4920	5700
4x120	14.4	49.9	53.9	6300	7200
4x150	16.1	54.9	58.9	7578	9000
3x50+3x25/3	9	29.4	32.4	2320	2250
3x70+3x35/3	10.6	34.8	37.8	3200	3150

On request all cross sections available as halogen free version with 5GM3 outer sheath.

PROTOMONT (MT) (N)SSHOEU 0.6/1 kV					
Number of cores x cross section	Conductor diameter max. mm	Outer diameter min. mm	Outer diameter max. mm	Net weight (approx.) kg/km	Permissible tensile force max. N
PROTOMONT (MT) (N)SSHOEU-J (continued)					
3x95/50	12.4	43.6	46.6	4600	4275
3x95+3x50/3	12.8	40.9	43.9	4270	4275
3x120+3x70/3	14.4	44.7	47.7	5350	5400
3x150+3x70/3	16.5	50.8	54.8	6930	6750
3x185+3x95/3	17.9	54.5	58.5	8150	8325
3x240+3x120/3	20.6	62.2	66.2	10200	10800
3x300+3x150/3	23.4	70.3	74.3	13250	13500
5x1.5	1.6	11.9	13.5	245	113
5x2.5	2	12.9	14.5	297	188
5x4	2.4	14.7	16.7	414	300
5x6	2.9	16.1	18.1	530	450
5x10	3.9	19	21	795	750
5x16	5.2	23.2	25.2	1200	1200
5x25	6.4	28	31	1850	1875
5x35	7.5	34.5	37.5	2650	2625
PROTOMONT (MT) (N)SSHOEU-O Control cables					
12x4	2.4	20.8	22.8	831	720
12x6	2.9	23.4	26.4	1129	1080
7x1.5	1.6	12.9	14.5	288	158
8x1.5	1.6	13.8	15.4	325	180
10x1.5	1.6	15.5	17.5	400	225
12x1.5	1.6	15.8	17.8	400	270
14x1.5	1.6	16.8	18.8	495	315
18x1.5	1.6	18.5	20.5	610	405
19x1.5	1.6	18.9	20.9	620	427
24x1.5	1.6	21.1	23.1	750	540
7x2.5	2	14.9	16.9	417	263
8x2.5	2	15.8	17.8	452	300
10x2.5	2	16.4	18.4	500	375
12x2.5	2	17.3	19.3	561	450
14x2.5	2	18.7	20.7	660	525
18x2.5	2	21.2	23.2	840	675
19x2.5	2	22.3	24.3	900	712
24x2.5	2	22.8	24.8	1009	900
37x2.5	2	29	31	1600	1388

On request all cross sections available as halogen free version with 5GM3 outer sheath.

PROTOMONT (MT) (N)SSHOEU	
Global data	
Brand	PROTOMONT (MT)
Type designation	(N)SSHOEU
Standard	DIN VDE 0250-812
Approvals	VDE-REG F546
Construction characteristics	
Conductor	Bare copper, class 5
Insulation	German made special cross-linked EPR, developed for optimized insulation thickness with retained cable properties.
Core identification	Light grey with black digits
Inner sheath	German made special cross-linked EPR, >GM1b
Outer sheath	German made special cross-linked CPE, 5GM5
Outer sheath colour	Yellow
Mechanical characteristics	
Resistance to impact	Very good
Abrasion resistance	Very good
Cable flexibility	Excellent
Cable handling	Excellent (due to optimized diameter and weight)
Fixed bending radius	D>12 mm: 4 (xD) – D<12 mm: 3 (xD)
Flexible bending radius	D>12 mm: 5 (xD) – D<12 mm: 4 (xD)
Max. tensile load on the conductor	15 N/mm²
Torsional stress	+/- 100 °/m
Usage characteristics	
Silicone free	Yes
Lead free	Yes
Chemical resistance	Temporary
Water resistance	Yes, up to 10 m submersing depth
Oil resistance	Yes
Ozone resistance	Yes
UV resistance	Yes
Max. conductor temperature in service	90 °C
Reaction to fire	IEC 60332-1-2
RoHS/REACH compliant	Yes
Weather resistance	Yes

PROTOMONT (MT) (N)SSHOEU	
Thermal parameters	
Max. permissible temperature at conductor	90 °C
Max. short circuit temperature	250 °C
Ambient temp. in flex. application (min. – max.)	-25 °C – +60 °C
Ambient temp. in fixed installation (min. – max.)	-40 °C – +80 °C
Max. permissible water temp.	40 °C
Electrical parameters	
Rated voltage	0.6/1 kV (600/1000V)
Max. permissible operating voltage AC	0.7/1.2 kV
Max. permissible operating voltage DC	0.9/1.8 kV
AC test voltage	3 kV (5 min)

Please check our homepage: www.prysmiangroup.de for more details.

Made locally.

We've been making cables in Germany since 1858. Today we have 2000 skilled co-workers developing state-of-the-art cables in six plants all over the country. We can offer a complete range of cables covering everything from the deep blue sea, mines and tunnels to skyscrapers and satellites.

Two of our facilities are Centres of Excellence including R&D departments in which we develop new solutions to meet your specific needs as well as the common challenges of tomorrow.

When that is not enough, we have the largest cable manufacturer in the world to our disposal, Prysmian Group. That includes 50 countries, 112 plants, 25 R&D centres and about 29,000 skilled professionals doing nothing but developing and producing cable solutions that will solve your current and future needs.

Linking the future

Prysmian Group

Prysmian Kabel und Systeme GmbH
Ph: +49 (0) 30 3675 40
E-mail: kontakt@prysmiangroup.com
www.prysmiangroup.de

Prysmian Group