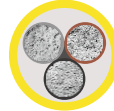


# BiTmining<sup>®</sup> NSSHOEU



Mining cables

Heavy duty rubber cable acc. to DIN VDE 0250-812



## Technical data:

### Thermal parameters:

#### Ambient temperature:

fixed installation: -40 °C to 80 °C  
free movement: -30 °C to 80 °C

**Max. permissible conductor temp.:** 90 °C

**Max. short-circuit temp. at conductor:** 200 °C

### Mechanical parameters:

**Max. tensile load on conductor:** 15 N/mm<sup>2</sup>

#### Bending radius:

fixed installation: 4 x outer - Ø  
free movement: 5 x outer - Ø

## Design:

### Main cores:

#### Conductors:

tinned copper wires, finely stranded, acc. to IEC 60228 class 5

#### Insulation:

EPR compound, type 3GI3 acc. to DIN VDE 0207-20, core colours: acc. to DIN VDE 0293-308

### Ground conductor:

#### Conductor:

tinned copper wires, finely stranded, acc. to IEC 60228 class 5

#### Insulation:

EPR compound, type 3GI3 acc. to DIN VDE 0207-20, core colours: green-yellow

#### Inner sheath:

synthetic rubber compound, type GM1b acc. to DIN VDE 0207-21, filling the interstices

#### Outer sheath:

heavy duty rubber compound, type 5GM5 acc. to DIN VDE 0207-21, colour: yellow, inkjet marking

## Application:

For the connection of mobile equipment and machines under very high mechanical loads in dry and damp areas, outdoors and in explosion hazard areas. Cables meet the requirements of DIN EN 50628: Erection of electrical installations in underground mines, DIN VDE 0168: Erection of electrical installation in open-cast mines, quarries and similar works and DIN VDE 0298-3: Application of cables and cords in power installations – Guide to use of non-harmonized low voltage cables.

## Chemical parameters:

Resistance to oil:	DIN EN / IEC 60811-404
Behaviour in case of fire:	DIN EN / IEC 60332-1-2
Weather resistance:	unrestricted use indoors, outdoors, resistance to ozone UV and moisture

## Electrical parameters:

Rated voltage $U_0/U$ [kV]	0.6/1 kV
Maximum permissible operating voltage $U_{0,max}$ in AC systems [kV]:	0.7/1.2 kV
Maximum permissible operating voltage $U_{s,max}$ in DC systems [kV]:	0.9/1.8 kV
AC. test voltage acc. to DIN VDE 0250-812:	
- main cores:	3 kV
- control cores:	2 kV
Current-carrying capacities in amperes acc to:	DIN VDE 0298-4 table 15 DIN EN 50628
De-rating factors acc. to:	DIN VDE 0298-4

# BiTmining<sup>®</sup>NSSHOEU

Heavy duty rubber cable acc. to DIN VDE 0250-812

## BiTmining<sup>®</sup>NSSHOEU-O

Cat. no.	n x mm <sup>2</sup>	Outer diameter min. – max. [mm]	Approximate cable weight [kg/km]
IP1400	1x1,5	6-9	55
IP1401	1x2,5	7-10	74
IP1402	1x4	8-11	95
IP1403	1x6	8-11	119
IP1404	1x10	10-13	175
IP1405	1x16	11-14	234
IP1406	1x25	13-16	377
IP1407	1x35	14-17	465
IP1408	1x50	16-19	622
IP1409	1x70	18-21	860
IP1410	1x95	21-24	1100
IP1411	1x120	22-25	1370
IP1412	1x150	25-28	1672
IP1413	1x185	28-31	2101
IP1414	1x240	31-34	2652

Cat. no.	n x mm <sup>2</sup>	Outer diameter min. – max. [mm]	Approximate cable weight [kg/km]
IP1415	1x300	34-37	3352
IP1487	1x400	38-41	4171
IP1399	1x500	43-46	5419
IP1416	2x1,5	11-14	172
IP1417	2x2,5	13-16	230
IP1418	2x4	15-18	309
IP1419	2x6	16-19	374
IP1420	2x10	19-22	561
IP1421	2x16	21-24	701
IP1422	2x25	26-29	1137
IP1423	2x35	28-31	1378
IP1424	2x50	32-35	1867
IP1425	2x70	36-39	2519
IP1426	2x95	41-44	3273
IP1427	2x120	48-51	4261

## BiTmining<sup>®</sup>NSSHOEU-J

Cat. no.	n x mm <sup>2</sup>	Outer diameter min. – max. [mm]	Approximate cable weight [kg/km]
IP1428	3x1,5	12-15	195
IP1429	3x2,5	14-17	266
IP1430	3x4	16-19	390
IP1431	3x6	17-20	475
IP1432	3x10	21-24	740
IP1433	3x16	23-26	949
IP1434	3x25	28-31	1465
IP1435	3x35	32-35	1883
IP1436	3x50	38-41	2607
IP1437	3x70	41-44	3416
IP1438	3x95	48-51	4523
IP1439	3x120	50-53	5373
IP1440	3x150	56-59	6537
IP1441	3x185	63-66	8214
IP4062	3x240	68-71	10167
IP1445	4x1,5	13-16	229
IP1446	4x2,5	16-19	358
IP1447	4x4	18-21	464
IP1448	4x6	19-22	573
IP1449	4x10	23-26	885
IP1450	4x16	26-29	1223
IP1451	4x25	32-35	1907
IP1452	4x35	34-37	2324
IP1453	4x50	41-44	3219
IP1454	4x70	45-48	4258
IP1455	4x95	52-55	5630
IP1456	4x120	57-60	6956
IP1457	4x150	62-65	8458
IP1458	4x185	71-74	10577
IP1459	5x1,5	14-17	267
IP1460	5x2,5	17-20	418
IP1461	5x4	19-22	546
IP1462	5x6	21-24	716
IP1463	5x10	25-28	1056
IP1464	5x16	28-31	1462
IP1465	5x25	35-38	2288
IP1466	5x35	39-42	2921
IP1467	5x50	44-47	3883
IP1468	5x70	51-54	5368
IP3989	5x95	57-60	6827
IP1469	6x1,5	16-19	348

Cat. no.	n x mm <sup>2</sup>	Outer diameter min. – max. [mm]	Approximate cable weight [kg/km]
IP1470	6x2,5	18-21	481
IP1471	6x4	21-24	671
IP1472	6x6	23-26	834
IP1473	6x10	27-30	1239
IP1474	6x16	30-33	1722
IP1475	6x25	38-41	2702
IP1476	6x35	42-45	3453
IP1477	6x50	50-53	4809
IP1478	7x1,5	17-20	395
IP1479	7x2,5	19-22	550
IP1480	7x4	22-25	763
IP1481	7x6	24-27	951
IP1482	7x10	30-33	1487
IP1483	7x16	34-37	2082
IP1484	7x25	42-45	3234
IP1485	7x35	45-48	3967
IP1486	7x50	53-56	5524
IP1498	8x2,5	21-24	626
IP4064	8x25	46-49	3866
IP1489	10x1,5	19-22	483
IP1490	10x2,5	23-26	723
IP4063	12x1	19-22	466
IP1491	12x1,5	20-23	571
IP1492	12x2,5	23-26	795
IP1493	12x4	28-31	1135
IP3990	14x1,5	20-23	595
IP1494	14x2,5	25-28	895
IP3991	14x4	29-32	1266
IP3992	16x1,5	21-24	657
IP1497	16x2,5	26-29	993
IP4000	18x1,5	23-26	749
IP4001	18x2,5	28-31	1211
IP3993	19x1,5	24-27	824
IP4003	19x2,5	29-32	1269
IP3994	21x1,5	25-28	869
IP3995	24x1,5	29-32	1073
IP4004	24x2,5	28-31	1644
IP3996	27x1,5	29-32	1177
IP3997	37x1,5	31-33	1368
IP3998	50x1,5	37-40	1945
IP3999	50x2,5	45-48	2983

# BiTmining<sup>®</sup>NSSHOEU

Heavy duty rubber cable acc. to DIN VDE 0250-812

## BiTmining<sup>®</sup>NSSHOEU.../3 protective conductor symmetrically split in the interstices

Cat. no.	n x mm <sup>2</sup>	Outer diameter min. – max. [mm]	Approximate cable weight [kg/km]
IP3980	3x25+3x16/3	29-32	1666
IP3981	3x35+3x16/3	31-34	1929
IP3982	3x50+3x25/3	36-39	2724
IP3983	3x70+3x35/3	41-44	3774
IP3984	3x120+3x70/3	49-52	5753
IP3985	3x150+3x70/3	56-59	7128
IP3986	3x185+3x95/3	62-65	8735
IP3987	3x240+3x120/3	68-71	11219

## BiTmining<sup>®</sup>NSSHOEU.../3E protective conductor symmetrically split over the insulated conductors, design acc. to DIN VDE 0250-1

Cat. no.	n x mm <sup>2</sup>	Outer diameter min. – max. [mm]	Approximate cable weight [kg/km]
IP4030	3x2,5+3x2,5/3E	15-18	339
IP4031	3x4+3x4/3E	18-21	470
IP4032	3x6+3x6/3E	19-22	601
IP4033	3x10+3x10/3E	23-26	915
IP4034	3x16+3x16/3E	25-28	1191
IP4035	3x25+3x16/3E	30-33	1713
IP4036	3x35+3x16/3E	32-35	2037
IP4037	3x50+3x25/3E	38-41	2906
IP4038	3x70+3x35/3E	43-46	3902
IP4039	3x95+3x50/3E	49-52	5037
IP4040	3x120+3x70/3E	53-56	6338
IP4041	3x150+3x70/3E	59-62	7504
IP4060	3x185+3x95/3E	67-70	9499

## BiTmining<sup>®</sup>NSSHOEU.../3E+ST protective conductor symmetrically split over the insulated conductors and ST conductors

Cat. no.	n x mm <sup>2</sup>	Outer diameter min. – max. [mm]	Approximate cable weight [kg/km]
IP4042	3x2,5+3x2,5/3E+3x1,5ST	20-23	569
IP4043	3x4+3x4/3E+3x1,5ST	20-23	586
IP4044	3x6+3x6/3E+3x1,5ST	20-23	663
IP4045	3x10+3x10/3E+3x2,5ST	23-26	971
IP4046	3x16+3x16/3E+3x2,5ST	25-28	1247
IP4047	3x25+3x16/3E+3x2,5ST	30-33	1777
IP4048	3x35+3x16/3E+3x2,5ST	32-35	2102
IP4049	3x50+3x25/3E+3x2,5ST	38-41	2946
IP4050	3x70+3x35/3E+3x2,5ST	43-46	3981
IP4051	3x95+3x50/3E+3x2,5ST	49-52	5108
IP4052	3x120+3x70/3E+3x2,5ST	53-56	6414
IP4053	3x150+3x70/3E+3x2,5ST	59-62	7581
IP4058	3x150+3x95/3E+3x2,5ST	59-62	7634
IP4059	3x185+3x95/3E+3x2,5ST	67-70	9547

# BiTmining<sup>®</sup>NSSHOEU

Heavy duty rubber cable acc. to DIN VDE 0250-812

## BiTmining<sup>®</sup>NSSHOEU.../KON concentric protective conductor between inner and outer sheath

Cat. no.	n x mm <sup>2</sup>	Outer diameter min. – max. [mm]	Approximate cable weight [kg/km]
IP3963	3x1,5/1,5 KON	14-17	236
IP3964	3x1,5/2,5 KON	14-17	246
IP3965	3x2,5/2,5 KON	15-18	322
IP3966	3x4/4 KON	19-22	468
IP3967	3x6/6 KON	20-23	578
IP3968	3x10/10 KON	24-27	892
IP3969	3x16/16 KON	26-29	1186
IP3961	3x35/16 KON	34-37	412
IP3962	3x70/35 KON	44-47	627
IP3970	4x4/4 KON	20-23	542
IP3971	4x6/6 KON	21-24	686
IP3972	4x10/10 KON	26-29	1056
IP3973	4x16/16 KON	29-32	1464
IP3974	5x2,5/2,5 KON	19-22	482
IP3975	5x4/4 KON	21-24	625
IP3976	5x6/6 KON	22-25	787
IP3977	7x1,5/1,5 KON	16-19	403
IP3978	12x1,5/1,5 KON	17-20	559
IP3979	5x95/50 KON	60-63	7648

Cable Factory BITNER reserves the right to modify the specifications without prior notice  
Note: on customer's request other cross sections or number of cores can be produced