URSUS® MT SUB-E PLUS 3,6/6 ÷ 12/20 kV

(N)TSCGECEWÖU
Based on DIN VDE 0250 Part 813



1 **PHASE CONDUCTORS**
MATERIAL: tinned copper
CONSTRUCTION: class 5 VDE 0295 (IEC 60228) (*)
INSULATION MATERIAL: 3GI3 quality rubber compound, according to VDE 0207 Part 20
SEMICONDUCTIVE LAYERS: semiconductive tape over the conductor and inner and outer semiconductive rubber layer on the insulation

2 **PROTECTIVE EARTH CONDUCTORS**
MATERIAL: bare copper
CONSTRUCTION: individual copper braid

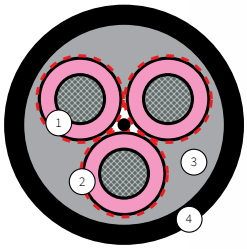
CENTRAL FILLER
MATERIAL: rubber compound on textile polyester support

CORES ASSEMBLY
ASSEMBLY: twisted cores
SEPARATOR ON THE TWISTED ASSEMBLY: semiconductive tape wound on the twisted cores

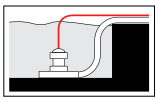
3 **INNER SHEATH**
MATERIAL: special EPR rubber compound water proofing GM1b quality, according to VDE 0207 Part 21
THICKNESS: according to VDE 0250 Part 813 (table 2)

4 **OUTER SHEATH**
MATERIAL: special CM rubber compound water proofing 5GM3 quality, according to VDE 0207 Part 21
THICKNESS: according to VDE 0250 Part 813 (table 2)
COLOUR: black

* Special construction to get improved flexibility



APPLICATION





Flexible energy supply cable for use in permanent immersion in water under high mechanical stresses: pumps, dredgers, float ingdocks, etc. It is suitable for immersion up to 300 m depth and for trailing operations of opencast mining equipment.

ELECTRICAL WORKING DATA

Nominal rated voltage U_0 / U	kV	3,6/6	6/10	8,7/15	12/20
Test voltage	kV	11	17	24	29
Max AC voltage	kV	4,2/7,2	6,9/12	10,4/18	13,9/24
Electrical field control		Inner and outer semiconductive layers extruded in a single pass with the insulation and the screen over every conductor			
Current rating	A	According to VDE 0298 Part 4			

THERMAL WORKING DATA

Maximum short circuit temperature	°C	250
Maximum working temp. on the conductor	°C	90
Minimum ambient temperature	°C	Mobile condition: - 25 Static condition: - 40

MECHANICAL WORKING DATA

Maximum water depth	m	300
Bending radius	mm	According to VDE 0298 Par t 3
Maximum tensile load*	N/mm^2	15

* Referred to the total phase conductors cross section

CHEMICAL WORKING DATA

Burning behaviour	Flame retardant according to IEC 60332-1-2
Oil resistance	According to IEC 60811-404
Ozone resistance	According to IEC 60811-403
UV resistance	According to ISO 4892-2
Behaviour in water	Water resistance test acc.to EN 50525-2-21 (AD8 condition) and AC internal test, suitable for immersion in sea and brackish water



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VOLTAGE	CORES X CROSS SECTION	CONDUCTOR Ø	MIN OVERALL Ø	MAX OVERALL Ø	APPROX WEIGHT	MAX TENSILE LOAD
kV	Nr x mm²	mm	mm	mm	kg/km	N
3,6/6	3x25 + 3x25/3e	6,8	43,4	45,1	2830	1125
3,6/6	3x35 + 3x25/3e	7,8	45,0	46,7	3180	1575
3,6/6	3x50 + 3x25/3e	9,4	48,1	49,8	3830	2250
3,6/6	3x70 + 3x35/3e	11,2	53,7	55,5	4960	3150
3,6/6	3x95 + 3x50/3e	12,7	58,4	60,2	6170	4275
3,6/6	3x120 + 3x70/3e	14,4	62,9	65,2	7540	5400
3,6/6	3x150 + 3x70/3e	16,3	69,3	71,7	9050	6750
3,6/6	3x185 + 3x95/3e	17,6	72,1	74,5	10350	8325
6/10	3x25 + 3x25/3e	6,8	43,4	45,7	2870	1125
6/10	3x35 + 3x25/3e	7,8	45,0	47,3	3220	1575
6/10	3x50 + 3x25/3e	9,4	48,1	50,4	3870	2250
6/10	3x70 + 3x35/3e	11,2	53,7	56,1	5000	3150
6/10	3x95 + 3x50/3e	12,7	58,4	60,8	6210	4275
6/10	3x120 + 3x70/3e	14,4	62,9	65,9	7580	5400
6/10	3x150 + 3x70/3e	16,3	69,3	72,4	9090	6750
6/10	3x185 + 3x95/3e	17,6	72,1	75,2	10390	8325
8,7/15	3x25 + 3x25/3e	6,8	49,4	51,2	3430	1125
8,7/15	3x35 + 3x25/3e	7,8	50,9	52,7	3800	1575
8,7/15	3x50 + 3x25/3e	9,4	55,8	57,6	4700	2250
8,7/15	3x70 + 3x35/3e	11,2	59,6	61,4	5670	3150
8,7/15	3x95 + 3x50/3e	12,7	63,3	65,6	6830	4275
8,7/15	3x120 + 3x70/3e	14,4	69,8	72,2	8520	5400
12/20	3x25 + 3x25/3e	6,8	55,9	57,7	4160	1125
12/20	3x35 + 3x25/3e	7,8	57,3	59,1	4560	1575
12/20	3x50 + 3x25/3e	9,4	60,5	62,3	5300	2250
12/20	3x70 + 3x35/3e	11,2	66,1	67,9	6580	3150
12/20	3x95 + 3x50/3e	12,7	69,8	72,2	7740	4275


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