URSUS® MT SUB PLUS 3,6/6 ÷ 12/20 kV

(N)TSCGEWÖU
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

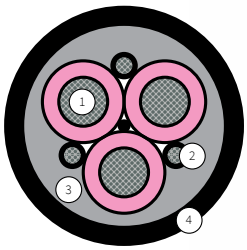
2 **EARTH CONDUCTORS**
MATERIAL: tinned copper
CONSTRUCTION: class 5 VDE 0295 (IEC 60228) (*)
COVERING MATERIAL: semiconductive layer

CENTRAL FILLER
MATERIAL: semiconductive compound on textile polyester support

CORES ASSEMBLY
ASSEMBLY: twisted cores with earth conductor split into 3 parts
SEPARATOR ON THE TWISTED ASSEMBLY: semiconductive tape around the twisted cores

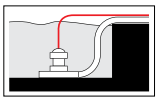
3 **INNER SHEATH**
MATERIAL: special EPR compound waterproof proofing GM1b quality, according to VDE 0207 Part 21
THICKNESS: according to VDE 0250 Part 813 (table 2)

4 **OUTER SHEATH**
MATERIAL: special CM rubber compound waterproof 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





Heavy duty flexible medium voltage power cable designed for permanent immersion in fresh or salt water where mechanical stress is likely. Suitable for immersion at depths to 300 meters.
For pumps, dredgers, floating docks and for trailing operations with opencast mining equipment. The cable is unarmoured and therefore is not suitable for under-water power transmission or installation in a waterway or where mechanical damage is possible.

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			
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	20

* 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 + 3x25/3	6,9	39,9	41,6	2580	1500
3,6/6	3x35 + 3x25/3	7,8	42,9	44,6	3080	2100
3,6/6	3x50 + 3x25/3	9,3	46,0	47,7	3710	3000
3,6/6	3x70 + 3x35/3	11,1	49,8	51,6	4670	4200
3,6/6	3x95 + 3x50/3	12,7	55,8	57,6	5880	5700
3,6/6	3x120 + 3x70/3	14,5	59,6	61,4	7140	7200
3,6/6	3x150 + 3x70/3	16,7	66,0	68,3	8690	9000
3,6/6	3x185 + 3x95/3	17,6	67,9	70,2	9890	11100
6/10	3x25 + 3x25/3	6,9	39,9	42,2	2620	1500
6/10	3x35 + 3x25/3	7,8	42,9	45,2	3120	2100
6/10	3x50 + 3x25/3	9,3	46,0	48,3	3750	3000
6/10	3x70 + 3x35/3	11,1	49,8	52,2	4710	4200
6/10	3x95 + 3x50/3	12,7	55,8	58,2	5920	5700
6/10	3x120 + 3x70/3	14,5	59,6	62,1	7180	7200
6/10	3x150 + 3x70/3	16,7	66,0	69,0	8730	9000
6/10	3x185 + 3x95/3	17,6	67,9	70,9	9930	11100
8,7/15	3x25 + 3x25/3	6,9	47,3	49,0	3310	1500
8,7/15	3x35 + 3x25/3	7,8	48,8	50,6	3680	2100
8,7/15	3x50 + 3x25/3	9,3	53,7	55,5	4580	3000
8,7/15	3x70 + 3x35/3	11,1	57,5	59,3	5600	4200
8,7/15	3x95 + 3x50/3	12,7	60,8	63,1	6550	5700
8,7/15	3x120 + 3x70/3	14,5	66,4	68,7	8130	7200
8,7/15	3x150 + 3x70/3	16,7	71,0	73,4	9460	9000
8,7/15	3x185 + 3x95/3	17,6	73,1	75,5	10700	11100
12/20	3x25 + 3x25/3	6,9	52,0	53,8	3830	1500
12/20	3x35 + 3x25/3	7,8	55,2	57,0	4440	2100
12/20	3x50 + 3x25/3	9,3	58,4	60,2	5170	3000
12/20	3x70 + 3x35/3	11,1	62,1	64,4	6250	4200
12/20	3x95 + 3x50/3	12,7	67,2	69,5	7480	5700
12/20	3x120 + 3x70/3	14,5	71,0	73,4	8840	7200

