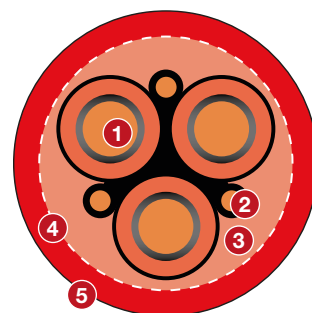


UTVFLEX® - R MT

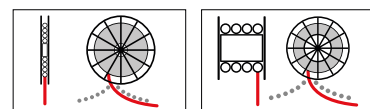
(N) TSCGEWÖU

Based on DIN VDE 0250 Part 813

Flexible reeling cable (UTVFLEX® R/MT) for high and extreme mechanical stresses, e.g. torsional stress, deflection into different planes and high reeling speed. Also usable for reeling application in underground and opencast mining.



APPLICATION



1 PHASE CONDUCTORS

MATERIAL: tinned copper
CONSTRUCTION: class 5 VDE 0295 (IEC 60228), special construction for higher flexibility
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), special construction for higher flexibility
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 wound on the twisted cores

3 INNER SHEATH

MATERIAL: Gm1b/5GM5 quality rubber compound, according to VDE 0207 Part 21

4 ANTITWISTING ELEMENT

MATERIAL: polyester braid between inner and outer sheath

5 OUTER SHEATH

MATERIAL: 5GM5 quality rubber compound, according to VDE 0207 Part 21 **COLOUR:** red

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: -30 Static condition: -50

MECHANICAL WORKING DATA

Bending radius	mm	According to VDE 0298 Part 3
Maximum torsional stress	°/m	± 25
Maximum tensile load*	N/mm²	30
Max working speed	m/min	120

* Referred to the total phase conductors cross section
 Upon request it's available the RF version with improved mechanical characteristics designed for ASC's and ARMG's for speed up to 240 m/min

CHEMICAL WORKING DATA

Oil resistance	According to IEC 60811-404
Ozone resistance	According to IEC 60811-403
Burning behaviour	According to IEC 60332-1-2
UV resistance	According to ISO 4892-2

UTVFLEX® - R MT

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	39,5	40,8	2390	2250
3,6/6	3x35 + 3x25/3	7,8	43,2	45,1	2930	3150
3,6/6	3x50 + 3x25/3	9,3	46,3	48,2	3540	4500
3,6/6	3x70 + 3x35/3	11,1	50,1	52,1	4450	6300
3,6/6	3x95 + 3x50/3	12,7	56,1	58,1	5610	8550
3,6/6	3x120 + 3x70/3	14,5	59,9	61,9	6800	10800
3,6/6	3x150 + 3x70/3	16,7	66,3	68,8	8300	13500
3,6/6	3x185 + 3x95/3	17,6	68,2	70,7	9440	16650
3,6/6	3x240 + 3x120/3	20,05	70,0	74,0	11650	21600

6/10	3x25 + 3x25/3	6,9	39,5	40,8	2390	2250
6/10	3x35 + 3x25/3	7,8	43,2	45,1	2930	3150
6/10	3x50 + 3x25/3	9,3	46,3	48,2	3540	4500
6/10	3x70 + 3x35/3	11,1	50,1	52,1	4450	6300
6/10	3x95 + 3x50/3	12,7	56,1	58,1	5670	8550
6/10	3x120 + 3x70/3	14,5	59,9	61,9	6860	10800
6/10	3x150 + 3x70/3	16,7	66,3	68,8	8360	13500
6/10	3x185 + 3x95/3	17,6	68,2	70,7	9540	16650
6/10	3x240 + 3x120/3	20,05	72,4	76,4	12080	21600

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
8,7/15	3x25 + 3x25/3	6,9	45	46,9	2870	2250
8,7/15	3x35 + 3x25/3	7,8	46,5	48,4	3220	3150
8,7/15	3x50 + 3x25/3	9,3	49,7	51,7	3850	4500
8,7/15	3x70 + 3x35/3	11,1	55,3	57,3	5020	6300
8,7/15	3x95 + 3x50/3	12,7	58,7	60,7	5900	8550
8,7/15	3x120 + 3x70/3	14,5	64,2	66,7	7400	10800
8,7/15	3x150 + 3x70/3	16,7	68,8	71,4	8630	13500
8,7/15	3x185 + 3x95/3	17,6	70,9	73,5	9790	16650
8,7/15	3x240 + 3x120/3	20,05	75,4	79,4	12550	21600

12/20	3x25 + 3x25/3	6,9	46,7	48,6	3090	2250
12/20	3x35 + 3x25/3	7,8	49,1	51,1	3470	3150
12/20	3x50 + 3x25/3	9,3	54	56	4330	4500
12/20	3x70 + 3x35/3	11,1	57,8	59,8	5330	6300
12/20	3x95 + 3x50/3	12,7	61,1	63,6	6210	8550
12/20	3x120 + 3x70/3	14,5	66,7	69,2	7760	10800
12/20	3x150 + 3x70/3	16,7	71,3	73,9	9010	13500
12/20	3x185 + 3x95/3	17,6	73,7	77,8	10640	16650
12/20	3x240 + 3x120/3	20,05	78,8	83,8	13160	21600

UTVFLEX® - RS MT (smaller version)

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	6,6	37,9	40,9	2360	2250
3,6/6	3x35 + 3x25/3	8	39,6	42,6	2730	3150
3,6/6	3x50 + 3x25/3	9,3	42,8	45,8	3350	4500
3,6/6	3x70 + 3x35/3	11,2	46,9	49,9	4290	6300
3,6/6	3x95 + 3x50/3	13	51,1	55,1	5320	8550
3,6/6	3x120 + 3x70/3	15	55,8	59,8	6690	10800
3,6/6	3x150 + 3x70/3	16,9	61,1	65,1	7870	13500
3,6/6	3x185 + 3x95/3	18,3	65,3	69,3	9360	16650
3,6/6	3x240 + 3x120/3	20,5	70,0	74,0	11650	21600

6/10	3x25 + 3x25/3	6,6	38,7	41,7	2410	2250
6/10	3x35 + 3x25/3	8	40,8	43,8	2810	3150
6/10	3x50 + 3x25/3	9,3	43,7	46,7	3430	4500
6/10	3x70 + 3x35/3	11,2	47,8	50,8	4380	6300
6/10	3x95 + 3x50/3	13	52	56	5410	8550
6/10	3x120 + 3x70/3	15	56,3	60,3	6750	10800
6/10	3x150 + 3x70/3	16,9	62	66	7980	13500
6/10	3x185 + 3x95/3	18,3	65,9	69,9	9430	16650
6/10	3x240 + 3x120/3	20,5	72,4	76,4	12080	21600

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
8,7/15	3x25 + 3x25/3	6,6	40,5	43,5	2590	2250
8,7/15	3x35 + 3x25/3	8	42,6	45,6	3000	3150
8,7/15	3x50 + 3x25/3	9,3	45,8	48,8	3640	4500
8,7/15	3x70 + 3x35/3	11,2	50,2	54,2	4690	6300
8,7/15	3x95 + 3x50/3	13	54,5	58,5	5710	8550
8,7/15	3x120 + 3x70/3	15	60,5	64,5	7290	10800
8,7/15	3x150 + 3x70/3	16,9	64,6	68,6	8330	13500
8,7/15	3x185 + 3x95/3	18,3	68	72	9760	16650
8,7/15	3x240 + 3x120/3	20,5	75,4	79,4	12550	21600

12/20	3x25 + 3x25/3	6,6	45	48	2990	2250
12/20	3x35 + 3x25/3	8	47	50	3370	3150
12/20	3x50 + 3x25/3	9,3	50	54	4110	4500
12/20	3x70 + 3x35/3	11,2	54,1	58,1	5120	6300
12/20	3x95 + 3x50/3	13	58	62	6120	8550
12/20	3x120 + 3x70/3	15	64,3	68,3	7810	10800
12/20	3x150 + 3x70/3	16,9	68,4	72,4	8870	13500
12/20	3x185 + 3x95/3	18,3	73,7	77,7	10640	16650
12/20	3x240 + 3x120/3	20,5	78,8	83,8	13160	21600

The diameter and weight shown is approximate, they may have some tolerance (to be confirmed when ordering).
Other cross sections and colors available upon request.