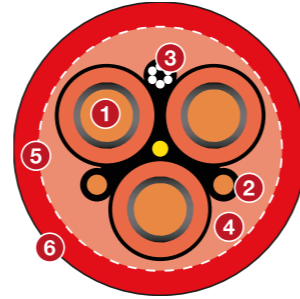


UTVFLEX® - RF MT FO

(N)TSKCGEWÖU

Based on DIN VDE 0250 Part 813

Flexible reeling cable with integrated fibre optics wires 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.



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

3 FIBRE OPTICS

FIBRE: transmission data kind 50/125 multimode, 62.5/125 multimode, 9/125 singlemode
NOMINAL NUM. APERTURE: 250 µm

CENTRAL CRADLE

MATERIAL: semiconductive compound on Kevlar® element

CORES ASSEMBLY

ASSEMBLY: twisted cores with earth conductor split into 2 parts + FO
SEPARATOR ON THE TWISTED ASSEMBLY: semiconductive tape wound on the twisted cores

4 INNER SHEATH

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

5 ANTITWISTING ELEMENT

MATERIAL: polyester braid between inner and outer sheath

6 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

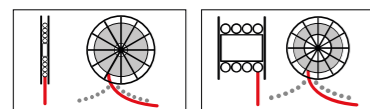
Bending radius	mm	According to VDE 0298 Part 3
Maximum torsional stress	°/m	±25
Maximum tensile load*	N	See table on pages 46 and 47
Max working speed	m/min	240

* Referred to the total phase conductors cross section

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

APPLICATION



UTVFLEX® - RF MT FO

VOLTAGE	CORES X CROSS SECTION	CONDUCTOR Ø	MIN OVERALL Ø	MAX OVERALL Ø	APPROX WEIGHT	MAX TENSILE LOAD
kV	Nr x mm ²	mm	mm	mm	kg/km	N
3,6/6	3x25 + 2x25/2 + FO	6,9	42,9	44,6	2930	6250
3,6/6	3x35 + 2x25/2 + FO	7,8	46,2	47,9	3490	7150
3,6/6	3x50 + 2x25/2 + FO	9,3	49,4	51,2	4170	8500
3,6/6	3x70 + 2x35/2 + FO	11,1	53,2	55,3	5190	10300
3,6/6	3x95 + 2x50/2 + FO	12,7	59,3	61,4	6460	12550
3,6/6	3x120 + 2x70/2 + FO	14,5	63,1	65,5	7740	14800
3,6/6	3x150 + 2x70/2 + FO	16,7	69,6	72,1	9340	17500

6/10	3x25 + 2x25/2 + FO	6,9	42,9	44,6	2930	6250
6/10	3x35 + 2x25/2 + FO	7,8	46,2	47,9	3490	7150
6/10	3x50 + 2x25/2 + FO	9,3	49,4	51,2	4170	8500
6/10	3x70 + 2x35/2 + FO	11,1	53,2	55,3	5190	10300
6/10	3x95 + 2x50/2 + FO	12,7	59,3	61,4	6520	12550
6/10	3x120 + 2x70/2 + FO	14,5	63,1	65,5	7800	14800
6/10	3x150 + 2x70/2 + FO	16,7	69,6	72,1	9400	17500

VOLTAGE	CORES X CROSS SECTION	CONDUCTOR Ø	MIN OVERALL Ø	MAX OVERALL Ø	APPROX WEIGHT	MAX TENSILE LOAD
kV	Nr x mm ²	mm	mm	mm	kg/km	N
8,7/15	3x25 + 2x25/2 + FO	6,9	47,7	49,4	3450	6250
8,7/15	3x35 + 2x25/2 + FO	7,8	49,6	51,7	3900	7150
8,7/15	3x50 + 2x25/2 + FO	9,3	52,8	54,9	4580	8500
8,7/15	3x70 + 2x35/2 + FO	11,1	58,5	60,6	5870	10300
8,7/15	3x95 + 2x50/2 + FO	12,7	61,8	64,2	6820	12550
8,7/15	3x120 + 2x70/2 + FO	14,5	67,5	69,9	8380	14800

12/20	3x25 + 2x25/2 + FO	6,9	50,2	52,3	3730	6250
12/20	3x35 + 2x25/2 + FO	7,8	52,3	54,4	4190	7150
12/20	3x50 + 2x25/2 + FO	9,3	57,2	59,3	5110	8500
12/20	3x70 + 2x35/2 + FO	11,1	61	63,4	6220	10300
12/20	3x95 + 2x50/2 + FO	12,7	64,4	66,8	7190	12550
12/20	3x120 + 2x70/2 + FO	14,5	70,1	72,6	8820	14800

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.