URSUS® MT TUNNEL I PLUS 3,6/6 ÷ 12/20 kV

Based on IEC 60502-2



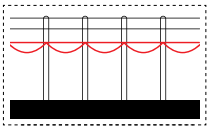
Cable construction

1	**Phase Conductors**	Conductor material	Bare copper
		Conductor construction	Class 5, according to IEC 60228
		Insulation material	HEPR, G7 quality
		Semiconductive layers	Semiconductive tape over the conductor and inner and outer semiconductive rubber layer on the insulation
2	**Protec. Earth Conductors**	Material	Bare copper
		Construction	Individual copper wire screen
3	**Control Conductors**	Nominal cross section	2,5 mm^2
		Conductor material	Tinned copper
		Conductor construction	Class 5, according to IEC 60228
		Insulation material	Rubber compound
	Central Filler	Material	Rubber compound on textile polyester support
	Cores Assembly	Assembly	Twisted cores
		Separator on the twisted assembly	TNT tape wound on the twisted cores
4	**Inner Sheath**	Sheath material	PVC, Rz quality
5	**Armor**	Material	Steel wire braid
		Assembly	Braid over the inner sheath
6	**Outer Sheath**	Material	PVC, Rz quality
		Colour	Red

Upon request:
URSUS® MT TUNNEL I ATOX PLUS: special version with LSOH outer sheath.



Main applications



Applications Flexible cable for energy supply of MV equipment, in tunnelling and underground mining applications, according to IEC 60502-2 Standard.

Electrical working data

Nominal rated voltage U_0 / U	kV	3,6/6	6/10	8,7/15	12/20
Test voltage	kV	12,5	21	30,5	42
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
Ambient temperature: mobile condition	°C	+ 5 to + 80
Ambient temperature: static condition	°C	- 40 to + 80

Mechanical working data

Bending radius	mm	According to VDE 0298 Part 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, EN 60332-1-2
Weather resistance	For indoor and outdoor application

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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 + 3x2,5ST	6,1	36,3	40,2	2250	1125
3,6/6	3x35 + 3x2,5ST	7,2	38,8	43,0	3200	1575
3,6/6	3x50 + 3x2,5ST	8,9	42,5	47,0	3860	2250
3,6/6	3x70 + 3x2,5ST	10,6	46,1	50,8	4630	3150
3,6/6	3x95 + 3x2,5ST	12,3	49,9	55,0	5680	4275
3,6/6	3x120 + 3x2,5ST	13,8	56,8	62,5	7010	5400
3,6/6	3x150 + 3x2,5ST	15,5	57,8	63,5	7910	6750
3,6/6	3x185 + 3x2,5ST	17,0	61,2	67,1	9060	8325
6/10	3x25 + 3x2,5ST	6,1	36,3	40,8	2290	1125
6/10	3x35 + 3x2,5ST	7,2	38,8	43,6	3240	1575
6/10	3x50 + 3x2,5ST	8,9	42,5	47,6	3900	2250
6/10	3x70 + 3x2,5ST	10,6	46,1	51,4	4670	3150
6/10	3x95 + 3x2,5ST	12,3	49,9	55,6	5720	4275
6/10	3x120 + 3x2,5ST	13,8	56,8	63,2	7050	5400
6/10	3x150 + 3x2,5ST	15,5	57,8	64,2	7950	6750
6/10	3x185 + 3x2,5ST	17,0	61,2	67,8	9100	8325

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 + 3x2,5ST	6,1	40,9	45,2	3040	1125
8,7/15	3x35 + 3x2,5ST	7,2	42,9	47,4	3470	1575
8,7/15	3x50 + 3x2,5ST	8,9	46,9	51,8	4280	2250
8,7/15	3x70 + 3x2,5ST	10,6	51,5	56,7	5300	3150
8,7/15	3x95 + 3x2,5ST	12,3	55,2	60,7	6420	4275
8,7/15	3x120 + 3x2,5ST	13,8	57,1	62,8	7120	5400
8,7/15	3x150 + 3x2,5ST	15,5	62,1	68,2	8600	6750
12/20	3x25 + 3x2,5ST	6,1	43,8	48,4	3410	1125
12/20	3x35 + 3x2,5ST	7,2	45,7	50,4	3830	1575
12/20	3x50 + 3x2,5ST	8,9	49,3	54,4	4570	2250
12/20	3x70 + 3x2,5ST	10,6	54,1	59,6	5760	3150
12/20	3x95 + 3x2,5ST	12,3	57,8	63,5	6890	4275
12/20	3x120 + 3x2,5ST	13,8	61,0	66,9	7650	5400