

# Cable MTS105



## Application

The Conduspar Line of Cables MTS105 is suitable for power distribution circuits in medium voltage up to 35 kV. MTS105 cables are the best solution for medium voltage connections of consumers with large size, condominiums and industries. The EPR105, insulating material used in the MTS105 line, brings together the maximum current capacity and the most optimized construction

## Construction

**Conductor:** bare electrolytic copper wires, soft hardness, stringing of class 2 compact, acc. to NM 280.

**Conductor shielding:** semiconductive thermosetting compound.

**Insulation:** thermosetting compound of EPR105 (ethylene propylene rubber), with coordinated, extruded and vulcanized thickness simultaneously with the semiconductive shieldings.

**Insulation shielding:** semiconductive thermosetting compound, with ease cold extraction.

**Metallic shielding:** bare copper wiring crown, effective section of 6,5 mm<sup>2</sup>.

**Coverage:** thermoplastic compound of PVC/ST2 in black.

## Voltage classes

3,6/6 kV, 6/10 kV, 8,7/15 kV, 12/20 kV, 15/25 kV and 20/35 kV

## Maximum Operating Temperatures

In continuous regime: 105°C

In overload: 140°C

In short circuit: 250°C

## Reference Standards

ABNT NBR 7286 - Power cables with extruded insulation of ethylene propylene rubber (EPR) for voltages from 1 to 35 kV - Performance requirements.

ABNT NBR NM 280 - Conductors of insulated cables (IEC 60228, MOD).

## Conditioning

In reels.

# Cable MTS105

## Nominal Dimensions

Unipolar Cables 3,6/6 kV						
Conductor		Insulation		Coverage		Nominal Weight (kg/km)
Section n	Diameter (mm)	Thickness (mm)	Diameter (mm)	Thickness (mm)	Diameter (mm)	
10	3,74	2,5	9,94	1,2	15,7	360
16	4,69	2,5	10,89	1,2	16,8	440
25	5,89	2,5	12,09	1,3	18,1	535
35	6,95	2,5	13,15	1,3	19,3	670
50	8,15	2,5	14,35	1,3	20,6	785
70	9,55	2,5	15,75	1,4	22,2	995
95	11,33	2,5	17,53	1,5	24,2	1.275
120	12,85	2,5	19,05	1,5	25,9	1.535
150	14,00	2,5	20,2	1,5	27,1	1.860
185	15,78	2,5	21,98	1,6	29,1	2.180
240	18,15	2,8	24,95	1,7	32,4	2.782
300	20,15	2,8	26,95	1,8	34,7	3.305
400	22,99	2,8	29,79	1,9	37,8	4.125
500	26,45	2,8	33,25	2,0	41,7	5.180

Unipolar Cables 12/20 kV						
Conductor		Insulation		Coverage		Nominal Weight (kg/km)
Section n	Diameter (mm)	Thickness (mm)	Diameter (mm)	Thickness (mm)	Diameter (mm)	
16	4,69	5,2	16,29	1,4	22,8	630
25	5,89	4,7	16,49	1,4	23,0	740
35	6,95	4,0	16,15	1,4	22,6	770
50	8,15	4,0	17,35	1,4	24,0	985
70	9,55	4,0	18,75	1,5	25,5	1.225
95	11,33	4,0	20,53	1,6	27,5	1.510
120	12,85	4,0	22,05	1,6	29,2	1.790
150	14,00	4,0	23,2	1,7	30,5	2.075
185	15,78	4,0	24,98	1,7	32,5	2.460
240	18,15	4,5	28,35	1,8	36,2	3.070
300	20,15	4,5	30,35	1,9	38,4	3.610
400	22,99	4,5	33,19	2,0	41,6	4.585
500	26,45	4,5	36,65	2,1	45,4	5.690

Unipolar Cables 6/10 kV						
Conductor		Insulation		Coverage		Nominal Weight (kg/km)
Section n	Diameter (mm)	Thickness (mm)	Diameter (mm)	Thickness (mm)	Diameter (mm)	
16	4,69	2,5	10,89	1,2	16,8	440
25	5,89	2,5	12,09	1,3	18,1	535
35	6,95	2,5	13,15	1,3	19,3	670
50	8,15	2,5	14,35	1,3	20,6	805
70	9,55	2,5	15,75	1,4	22,2	995
95	11,33	2,5	17,53	1,5	24,2	1.275
120	12,85	2,5	19,05	1,5	25,9	1.535
150	14,00	2,5	20,2	1,5	27,1	1.860
185	15,78	2,5	21,98	1,6	29,1	2.180
240	18,15	2,8	24,95	1,7	32,4	2.782
300	20,15	2,8	26,95	1,8	34,7	3.305
400	22,99	2,8	29,79	1,9	37,8	4.125
500	26,45	2,8	33,25	2,0	41,7	5.180

Unipolar Cables 15/25 kV						
Conductor		Insulation		Coverage		Nominal Weight (kg/km)
Section n	Diameter (mm)	Thickness (mm)	Diameter (mm)	Thickness (mm)	Diameter (mm)	
35	6,95	6,2	20,55	1,6	27,5	985
50	8,15	5,5	20,35	1,6	27,3	1.065
70	9,55	5,5	21,75	1,6	28,9	1.350
95	11,33	5,5	23,53	1,7	30,8	1.600
120	12,85	5,5	25,05	1,7	32,5	1.880
150	14,00	5,5	26,2	1,8	33,8	2.175
185	15,78	5,5	27,98	1,8	35,8	2.565
240	18,15	5,0	29,35	1,9	37,3	3.080
300	20,15	5,0	31,35	1,9	39,5	3.670
400	22,99	5,0	34,19	2,0	42,7	4.555
500	26,45	5,0	37,65	2,2	46,6	5.780

Unipolar Cables 8,7/15 kV						
Conductor		Insulation		Coverage		Nominal Weight (kg/km)
Section n	Diameter (mm)	Thickness (mm)	Diameter (mm)	Thickness (mm)	Diameter (mm)	
25	5,89	3,0	13,09	1,3	19,2	575
35	6,95	3,0	14,15	1,3	20,4	685
50	8,15	3,0	15,35	1,4	21,7	820
70	9,55	3,0	16,75	1,4	23,3	1.045
95	11,33	3,0	18,53	1,5	25,3	1.320
120	12,85	3,0	20,05	1,5	27,0	1.580
150	14,00	3,0	21,2	1,6	28,3	1.860
185	15,78	3,0	22,98	1,6	30,2	2.235
240	18,15	3,5	26,35	1,8	34,0	2.870
300	20,15	3,5	28,35	1,8	36,2	3.450
400	22,99	3,5	31,19	1,9	39,4	4.415
500	26,45	3,5	34,65	2,1	43,2	5.500

Unipolar Cables 20/35 kV						
Conductor		Insulation		Coverage		Nominal Weight (kg/km)
Section n	Diameter (mm)	Thickness (mm)	Diameter (mm)	Thickness (mm)	Diameter (mm)	
50	8,15	8,2	25,75	1,7	33,3	1.340
70	9,55	7,5	25,75	1,7	33,4	1.550
95	11,33	7,5	27,53	1,8	35,3	1.930
120	12,85	7,5	29,05	1,9	37,0	2.215
150	14,00	7,5	30,2	1,9	38,3	2.540
185	15,78	6,5	29,98	1,9	38,0	2.775
240	18,15	6,5	32,35	2,0	40,7	3.405
300	20,15	6,5	34,35	2,0	42,9	3.945
400	22,99	6,5	37,19	2,1	46,0	4.495
500	26,45	6,5	40,65	2,3	49,9	5.925