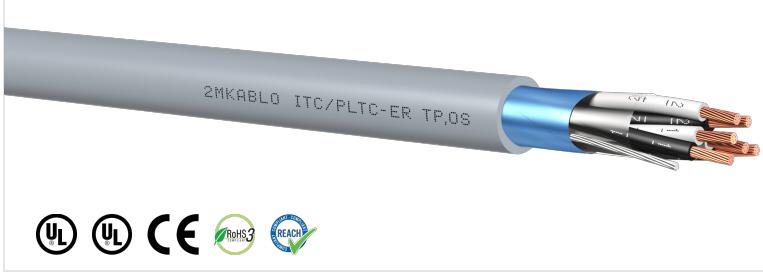
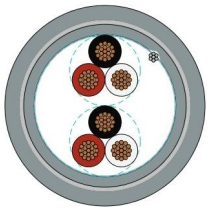
TYPE ITC/PLTC-ER - Overall Shielded Pairs (Triads)





Areas of Use

Instrumentation cables have a wide range of usage in process control and data processes, in analog and digital signal transmission. Factories, refineries, petrochemical plants, power plants, natural gas filling plants etc. make up the general areas that these cables are used. These cables meets the crush and impact requirements and deformation resistance according to UL 2556.

Cable Construction

Conductor	Stranded Annealed Copper (ASTM B3)
Insulation	PVC (UL 1581 Class 105°C, EN 50363-3 TI3)
Core Colors	Pair: Black / White, Numbered Triples: Black / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Lay-up	Pairs / triples / quads are stranded in layers
Separator	PET Foil
Outer Sheath	Heat Resistant and Sunlight Resistant PVC (UL 1581 Class 105°C), Black, Blue (other colors upon request)
Reference Standards	UL 13, UL 2250, NEC Article 725, NEC Article 727
Overall Screen	Al-PET Foil (with 7x0.3 mm Stranded Tinned Copper)

Technical Properties

Operating Voltage	300 V
Test Voltage	1.5 kV
Dielectric Voltage Withstand	UL 2556
Conductor Resistance	UL 1581 - Section 220
Max. Operating Temperature	Fixed: -40°C ... +105°C, Flexible: -5°C ... +60°C
Flame Retardancy	FT4/IEEE 1202 Flame Test (UL 1685), IEC/EN 60332-1, IEC/EN 60332-3-24 (CAT C)
Oil Resistance	ASTM No 2 oil 70°C 4 hours (IEC / EN 60811- 404)
Sunlight Resistance	Acc. to UL 1581, Sec. 1200
Min. Bending Radius (Fixed)	8 x Cable Diameter
Insulation Resistance	>100.1 MΩ/kft (at 15.6°C)

Cross Section

Configuration / Cross-Section (AWG)	Cable Diameter (mm) (± 5%)	Copper Weight (kg / km)	~ Cable Weight (kg / km)
1x2x20	6.1	4.51	43
1x2x18	6.7	7.55	50
1x2x16	7.3	11.72	59
1x2x14	8.6	20.24	80

2x2x20	8.4	4.51	61
2x2x18	9.4	7.55	71
2x2x16	10.6	11.72	88
2x2x14	12.7	20.24	120
3x2x20	8.8	4.51	67
3x2x18	9.9	7.55	80
3x2x16	11.2	11.72	99
3x2x14	13.5	20.24	137
4x2x20	9.6	4.51	77
4x2x18	11.0	7.55	96
4x2x16	12.2	11.72	112
4x2x14	14.8	20.24	157
5x2x20	10.6	4.51	91
5x2x18	11.9	7.55	107
5x2x16	13.3	11.72	126
5x2x14	16.6	20.24	196
7x2x20	11.5	4.51	106
7x2x18	12.9	7.55	125
7x2x16	14.4	11.72	146
7x2x14	18.1	20.24	231
10x2x20	14.3	4.51	138
10x2x18	16.8	7.55	182
10x2x16	18.8	11.72	212
10x2x14	23.5	20.24	329
12x2x20	14.8	4.51	150
12x2x18	17.3	7.55	197
12x2x16	19.4	11.72	230
12x2x14	24.3	20.24	360
16x2x20	16.8	4.51	197
16x2x18	19.2	7.55	233
16x2x16	21.5	11.72	273
16x2x14	27.0	20.24	430
20x2x20	18.6	4.51	229
20x2x18	21.3	7.55	272
20x2x16	24.4	11.72	346
20x2x14	30.1	20.24	504
24x2x20	20.6	4.51	263
24x2x18	24.0	7.55	338
24x2x16	27.0	11.72	395
24x2x14	34.4	20.24	658
1x3x20	6.4	4.51	46
1x3x18	7.0	7.55	54
1x3x16	7.6	11.72	64
1x3x14	9.1	20.24	88
2x3x20	9.2	4.51	70
2x3x18	10.5	7.55	87

2x3x16	11.5	11.72	101
2x3x14	14.1	20.24	141
3x3x20	9.7	4.51	80
3x3x18	11.1	7.55	99
3x3x16	12.2	11.72	115
3x3x14	15.0	20.24	164
4x3x20	10.8	4.51	97
4x3x18	12.1	7.55	114
4x3x16	13.3	11.72	132
4x3x14	17.0	20.24	211
5x3x20	11.7	4.51	110
5x3x18	13.1	7.55	129
5x3x16	14.5	11.72	150
5x3x14	18.5	20.24	240

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