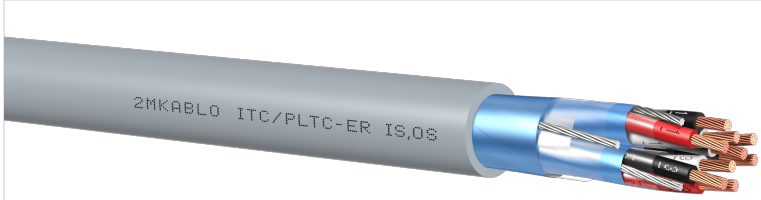
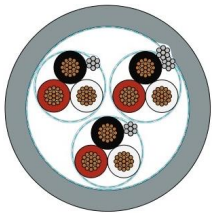
TYPE ITC/PLTC-ER - Individual & Overall Shielded





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)
Core Colors	Pair: Black / White, Numbered Triples: Black / White / Red, Numbered Quad: Black / White / Red / Blue, Numbered
Individual Seperaor	PET Foil
Individual Screen	Al-PET Foil (with 0.60 mm Tinned Copper Drain Wire)
Lay-up	Shielded 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)
Insulation	PVC / Nylon (UL 1581 Class 90°C, EN 50363-3 TI3)

Technical Properties

Operating Voltage	300 V
Test Voltage	1.5 kV
Dielectric Voltage Withstand	UL 2556
Conductor Resistance	UL 1581 - Section 220
Insulation Resistance	>100.1 MΩ/kft (at 15.6°C)
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

Cross Section

Configuration / Cross-Section (AWG)	Cable Diameter (mm) (± 5%)	Copper Weight (kg / km)	~ Cable Weight (kg / km)
2x2x20	9.1	4.51	74

2x2x18	10.3	7.55	90
2x2x16	11.4	11.72	104
2x2x14	13.7	20.24	138
3x2x20	9.6	4.51	87
3x2x18	10.9	7.55	104
3x2x16	12.1	11.72	120
3x2x14	14.6	20.24	161
4x2x20	10.6	4.51	105
4x2x18	11.9	7.55	120
4x2x16	13.2	11.72	139
4x2x14	16.5	20.24	206
5x2x20	11.5	4.51	121
5x2x18	12.9	7.55	137
5x2x16	14.4	11.72	158
5x2x14	18.0	20.24	234
7x2x20	12.5	4.51	146
7x2x18	14.1	7.55	166
7x2x16	16.2	11.72	209
7x2x14	19.6	20.24	281
10x2x20	16.2	4.51	213
10x2x18	18.3	7.55	241
10x2x16	20.4	11.72	276
10x2x14	25.5	20.24	402
12x2x20	16.7	4.51	236
12x2x18	18.9	7.55	266
12x2x16	21.1	11.72	305
12x2x14	26.4	20.24	445
16x2x20	18.4	4.51	286
16x2x18	20.9	7.55	323
16x2x16	23.9	11.72	397
16x2x14	29.3	20.24	539
2x3x20	10.4	4.51	118
2x3x18	11.5	7.55	136
2x3x16	12.6	11.72	156
2x3x14	15.9	20.24	226
3x3x20	11.0	4.51	137
3x3x18	12.2	7.55	157
3x3x16	13.4	11.72	180
3x3x14	16.9	20.24	261
4x3x20	11.9	4.51	153
4x3x18	13.3	7.55	176
4x3x16	14.7	11.72	208
4x3x14	18.6	20.24	300
5x3x20	13.0	4.51	176
5x3x18	14.5	7.55	201
5x3x16	16.5	11.72	254

5x3x14	20.3	20.24	340

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