

## FLEX-IS-CY-TP Intrinsically-Safe



**FLEX-IS-CY-TP** is an intrinsically-safe, blue jacketed, flexible, oil-resistant, overall shielded, multi-paired power and control cable designed for use in electrical equipment in dry, damp, wet and hazardous type -i- conditions. For use in flexible or stationary applications under medium mechanical stress with free movement without any tensile stress, loads or forced movements. Common applications include connections to machinery and electrical apparatus found in intrinsically-safe power circuits. These intrinsically safe circuits are circuits in which sparks and thermal effects cannot cause ignition in explosive atmospheres at normal operation or dangerous conditions. These connections do not use a grounding or earth core and require a separate power circuit. The twisted pair reduces crosstalk interference within the cable while the tinned copper braid shield provides interference-free data transmissions and added protection against electromagnetic interference. **FLEX-IS-CY-TP** cables are designed for appropriate use in a voltage range below 50V AC or 75V DC. Outdoor and direct burial installations are not permitted.



### Construction:

- Fine bare copper strands
- Strands to VDE-0295 Class-5, IEC 60228 Cl-5
- Special PVC core insulation in twisted pairs
- Color code DIN-47100 without color repetition
- Plastic foil wrap
- 85% Tinned Copper Braid
- Special PVC outer jacket - blue (RAL 5015)
- No ground wire
- **Extremely oil & chemical resistant**

### Technical:

- Working voltage: 300/500 volts
- Test voltage: 3000 volts
- Flexing bending radius: 15.0 x Ø
- Static bending radius: 6 x Ø
- Flexing temp: -5° C to +70° C
- Static temp: -40° C to +80° C
- Flame retardant: IEC 60332.1
- Insulation resistance: 20 MΩ x km

### Approvals:

- VDE-0245, 0250, 0281, 0282
- VDE-0165 Part-1 Intrinsically Safe
- DIN EN 60079-14
- IEC 60079-14 Section 12.2.2
- CE Low Voltage Directive 73/23/EEC and 93/68/EEC
- ROHS compliant

PART NUMBER	PAIRS	NOMINAL OD	CU LBS/MFT	WT LBS/MFT
<b>20 AWG (16/32) 0,50mm2</b>				
1922002	2	0.315" / 8.0mm	31	60
1922003	3	0.331" / 8.4mm	42	71
1922004	4	0.358" / 9.1mm	54	85
1922006	6	0.421" / 10.7mm	74	115
1922008	8	0.512" / 13.0mm	92	168
1922010	10	0.559" / 14.2mm	109	189
1922012	12	0.567" / 14.4mm	124	202
1922016	16	0.697" / 17.7mm	161	298
1922020	20	0.756" / 19.2mm	195	352
1922024	24	0.815" / 20.7mm	232	396
1922025	25	0.823" / 20.9mm	240	417
<b>18 AWG (24/32) 0,75mm2</b>				
1921802	2	0.343" / 8.7mm	40	70
1921803	3	0.362" / 9.2mm	58	86
1921804	4	0.394" / 10.0mm	72	105
1921806	6	0.437" / 11.1mm	98	145
1921808	8	0.575" / 14.6mm	121	207
1921810	10	0.630" / 16.0mm	148	238
1921812	12	0.646" / 16.4mm	179	272
1921816	16	0.787" / 20.0mm	221	376
1921820	20	0.850" / 21.6mm	285	450
1921824	24	0.957" / 24.3mm	327	533
1921825	25	0.961" / 24.4mm	355	539

\* Additional sizes may be available.