

## FLEX-IS-CY Intrinsically-Safe



**FLEX-IS-CY** is an intrinsically-safe, blue jacketed, flexible, oil-resistant, overall shielded, multi-conductor 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 tinned copper braid shield ensures interference-free data transmissions and added protection against electromagnetic interference. **FLEX-IS-CY** 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 CI-5
- Special PVC core insulation
- Color code VDE-0293 - black & numbered
- 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: 20.0 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	CORES	NOMINAL OD	CU LBS/MFT	WT LBS/MFT
<b>18 AWG (24/32) 0,75mm2</b>				
1911802	2	0.240" / 6.1mm	26	40
1911803	3	0.252" / 6.4mm	33	44
1911804	4	0.272" / 6.9mm	38	52
1911805	5	0.291" / 7.4mm	47	62
1911807	7	0.339" / 8.6mm	64	87
1911808	8	0.370" / 9.4mm	74	98
1911810	10	0.394" / 10.0mm	94	120
1911812	12	0.409" / 10.4mm	101	135
1911818	18	0.488" / 12.4mm	139	196
1911820	20	0.512" / 13.0mm	160	242
1911825	25	0.594" / 15.1mm	186	278
1911830	30	0.614" / 15.6mm	211	326
1911834	34	0.665" / 16.9mm	235	351
1911841	41	0.720" / 18.3mm	266	456
<b>17 AWG (32/32) 1,00mm2</b>				
1911702	2	0.252" / 6.4mm	31	44
1911703	3	0.264" / 6.7mm	38	54
1911704	4	0.287" / 7.3mm	46	66
1911705	5	0.307" / 7.8mm	60	85
1911707	7	0.358" / 9.1mm	74	106
1911712	12	0.441" / 11.2mm	113	174
1911718	18	0.520" / 13.2mm	164	255
1911725	25	0.638" / 16.2mm	223	358
1911734	34	0.709" / 18.0mm	295	497
<b>16 AWG (30/30) 1,50mm2</b>				
1911602	2	0.268" / 6.8mm	42	59
1911603	3	0.287" / 7.3mm	51	68
1911604	4	0.319" / 8.1mm	66	85
1911605	5	0.350" / 8.9mm	78	107
1911607	7	0.413" / 10.5mm	102	140
1911612	12	0.504" / 12.8mm	149	227
1911618	18	0.598" / 15.2mm	247	321
1911625	25	0.728" / 18.5mm	335	473
1911630	30	0.748" / 19.0mm	372	557
1911634	34	0.819" / 20.8mm	433	605

\* Additional sizes may be available.