

Industrial Data Solutions® - Industrial Data

DataBus® ISA/SP-50 FOUNDATION Fieldbus or PROFIBUS Cables



| De- scription | Part No. | UL NEC/ C(UL)/CEC Type IEC | Standard Lengths | | Standard Unit Weight | | Conductor (Stranding) Diameter Nom. DCR | Nominal Insulation OD | | Shielding Material Nom. DCR | Nominal OD | | Nom. Imp. (Ω) | Nom. Vel. of Prop. | Nominal Capacitance | | Nominal Attenuation | | |
|------------------|-------------|----------------------------------|---------------------|---|-------------------------|----|--|--------------------------|----|-----------------------------------|------------|----|---------------------|--------------------------|------------------------|------|---------------------|----------------|--------------|
| | | | ft. | m | lbs. | kg | | inch | mm | | inch | mm | | | pF/ft. | pF/m | MHz | dB/ 100 ft. | dB/ 100 m |

FOUNDATION Fieldbus/PROFIBUS PA • 18 AWG • Stranded (7x26) 1.2 mm Tinned Copper • Beldfoil® • 20 AWG Tinned Copper Drain Wire

Polyolefin Insulation • PVC Jacket (Orange and Blue)

| | | | | | | | | | | | | | | | | | | | |
|-------------------|--------------|---------|--------|------|-------|------|-----------|-------|------|--------------|-------|------|-------|-----|-----------|------|-------|-----|------|
| Type A | 3076F | NEC: | 250 | 76 | 10.6 | 4.8 | 1.22 mm | 0.088 | 2.24 | Overall | 0.253 | 6.43 | 100 @ | 66% | 24.0 | 78.7 | 0.039 | 0.1 | 0.26 |
| 300V 75°C | | PLTC CM | 500 | 152 | 18.5 | 8.4 | 18 AWG | | | Beldfoil® | | | | | 31.25 KHz | | | | |
| (31.25 kbits/sec) | | ITC | 1000 | 305 | 34.2 | 15.5 | (7x26) TC | | | + Drain Wire | | | | | | | | | |
| | | CEC: | 2500 | 762 | 85.1 | 38.6 | | | | (20 AWG TC) | | | | | | | | | |
| | | CM | † 5000 | 1524 | 170.4 | 77.3 | | | | | | | | | | | | | |



Shorting Fold

Color Code: Orange, Blue
 Fieldbus: Orange jacket
 Profibus PA: Intrinsically safe Blue jacket.
 Blue available as standard in 305 m put-up only.
 CPE jacket optional.

123076F – Version with Aluminum Interlocked Armor
 133076F – Version with Steel Interlocked Armor
 YM47023 – CPE jacketed version
 YM46698 – Black & White color-coded pairs
 YM47090 – Various colored jackets
 YM41725 – LSZH (FRNC) jacketed version

Polyolefin Insulation • FRNC/LSNH Jacket (Blue and Orange)

| | | | | | | | | | | | | | | | | | | | | |
|-----------|---------------|---------|------|------|-------|------|-----------|-------|------|--------------|-------|------|-----|-----|------|------|-------|-----|-----|-----|
| 300V 80°C | 3076NH | IEC | 1640 | 500 | 98.3 | 44.6 | 1.22 mm | 0.088 | 2.24 | Overall | 0.295 | 7.50 | 100 | 66% | 24.4 | 80.0 | 0.01 | 0.1 | 0.4 | |
| | | 332-3C | 3280 | 1000 | 191.1 | 86.7 | 18 AWG | | | Beldfoil® | | | | | | | 0.039 | 0.2 | 0.5 | |
| | | BS 7655 | | | | | (7x26) TC | | | + Drain Wire | | | | | | | | 0.1 | 0.2 | 0.8 |
| | | | | | | | | | | (20 AWG TC) | | | | | | | | 0.5 | 0.6 | 2.1 |
| | | | | | | | | | | | | | | | | | | 1.0 | 1.0 | 3.2 |



Shorting Fold

Color Code: White, Black

Polyolefin Insulation • FRNC/LSNH Inner Jacket (Black and Blue) • Steel Wire Armor • Black FRNC/LSNH Outer Jacket

| | | | | | | | | | | | | | | | | | | | | |
|-----------|---------------|---------|------|------|-------|-------|-----------|-------|------|--------------|---------|---------|-----|-----|------|------|--|--|--|-----------|
| 300V 80°C | 3076LS | IEC | 1640 | 500 | 394.8 | 179.1 | 1.22 mm | 0.088 | 2.24 | Overall | *0.295 | *7.50 | 100 | 66% | 24.4 | 80.0 | | | | see above |
| | | 332-3C | 3280 | 1000 | 737.0 | 334.3 | 18 AWG | | | Beldfoil® | **0.512 | **13.00 | | | | | | | | |
| | | BS 7655 | | | | | (7x26) TC | | | + Drain Wire | | | | | | | | | | |
| | | | | | | | | | | (20 AWG TC) | | | | | | | | | | |



Shorting Fold

* Under Armor
 ** Over Armor

Color Code: White, Black

FOUNDATION Fieldbus • 22 AWG • Stranded (7x30) 0.8 mm Tinned Copper • Beldfoil® • 20 AWG Tinned Copper Drain Wire

Polyolefin Insulation • Orange PVC Jacket

| | | | | | | | | | | | | | | | | | | | |
|-------------------|--------------|---------|--------|-----|------|------|-----------|-------|------|--------------|-------|------|-------|-----|-----------|------|-------|-----|-----|
| Type B | 3077F | NEC: | † 500 | 152 | 11.0 | 5.0 | 0.76 mm | 0.059 | 1.50 | Overall | 0.196 | 4.97 | 100 @ | 66% | 23.5 | 77.1 | 0.039 | 0.1 | 0.5 |
| 300V 150°C | | PLTC CM | † 1000 | 305 | 22.9 | 10.4 | 22 AWG | | | Beldfoil® | | | | | 31.25 KHz | | | | |
| (31.25 kbits/sec) | | ITC | | | | | (7x30) TC | | | + Drain Wire | | | | | | | | | |
| | | CEC: | | | | | | | | (20 AWG TC) | | | | | | | | | |
| | | CM | | | | | | | | | | | | | | | | | |



Shorting Fold

Color Code: Orange, Blue
 CPE and LSZH jacketed versions also available.

123077F – Version with Aluminum Interlocked Armor
 133077F – Version with Steel Interlocked Armor

Polyolefin Insulation • FRNC/LSNH Jacket (Blue and Orange)

| | | | | | | | | | | | | | | | | | | | | |
|-----------|---------------|---------|------|------|-------|------|-----------|-------|------|--------------|-------|------|-----|-----|------|------|-------|-----|-----|-----|
| 300V 80°C | 3077NH | IEC | 1640 | 500 | 86.9 | 39.4 | 0.76 mm | 0.059 | 1.50 | Overall | 0.295 | 7.50 | 100 | 66% | 25.9 | 85.0 | 0.01 | 0.2 | 0.6 | |
| | | 332-3C | 3280 | 1000 | 168.2 | 76.3 | 22 AWG | | | Beldfoil® | | | | | | | 0.039 | 0.2 | 0.7 | |
| | | BS 7655 | | | | | (7x30) TC | | | + Drain Wire | | | | | | | | 0.1 | 0.3 | 0.9 |
| | | | | | | | | | | (20 AWG TC) | | | | | | | | 0.5 | 1.1 | 3.5 |
| | | | | | | | | | | | | | | | | | | 1.0 | 1.6 | 5.1 |



Shorting Fold

Color Code: White, Black

Polyolefin Insulation • FRNC/LSNH Inner Jacket (Black and Blue) • Steel Wire Armor • Black FRNC/LSNH Outer Jacket

| | | | | | | | | | | | | | | | | | | | | |
|-----------|---------------|---------|------|------|-------|-------|-----------|-------|------|--------------|---------|---------|-----|-----|------|------|--|--|--|-----------|
| 300V 80°C | 3077LS | IEC | 1640 | 500 | 381.8 | 173.2 | 0.76 mm | 0.059 | 1.50 | Overall | *0.295 | *7.50 | 100 | 66% | 25.9 | 85.0 | | | | see above |
| | | 332-3C | 3280 | 1000 | 741.8 | 336.5 | 22 AWG | | | Beldfoil® | **0.512 | **13.00 | | | | | | | | |
| | | BS 7655 | | | | | (7x30) TC | | | + Drain Wire | | | | | | | | | | |
| | | | | | | | | | | (20 AWG TC) | | | | | | | | | | |



Shorting Fold

* Under Armor
 ** Over Armor

Color Code: White, Black

TC = Tinned Copper • DCR = DC resistance
 † Final put-up length may vary 0% to +10% from length shown.