

3M™ Shrunk Delta Ribbon (SDR) Cable Assembly

.80 mm High Speed Digital Data Transmission, 26 position

1SF26-L1XX-00C-XXX



- Supports AIA Industrial Camera Link® Standard for Mini C/L camera to frame grabber applications
- 11 shielded, twisted twinax pairs with four drain wires
- Double overall shield with inner foil and outer braid
- Rugged ribbon contact type
- Rugged thumbscrew retention
- EMI shielded overmolded junction shell
- Optional R/A overmolded backshells eliminate bend radius
- See the Regulatory Information Appendix (RIA) in the “RoHS compliance” section of www.3M.com/Interconnect for compliance information (RIA E1 & C1 apply)

Date Modified: August 10, 2009

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Physical

Connector Contact Plating:

Wiping Area: 30 μ " [0.76 μ m] Min Gold

Underplating: 100 μ " [2.55 μ m] Nickel

Overmolded Shell:

Color: Black

Material: Polyvinyl Chloride (PVC)

Cable:

Color: Beige

Jacket Material: Polyvinyl Chloride (PVC)

Flammability: AWM VW-1

Marking: 3M Logo

Electrical

Voltage Rating: 30 V

Current Rating: 0.5 A

Insulation Resistance: 1 X 10⁸ Ω min at 100 V_{DC}

Withstanding Voltage: 125 V_{AC} RMS for 1 minute

Individually Shielded Twisted Pairs

Characteristic Impedance: 100 \pm 10 Ω

Conductor Size: 28 AWG Stranded

Propagation Velocity: 1.25 ns/ft [4.1 ns/m]

Skew (within pair): 50 ps / meter maximum

Skew (channel skew per chipset): 50 ps / meter maximum

Environmental

Temperature Rating: 0°C to +70°C

UL File No.: E86982

Camera Link is a certification mark of Automated Imaging Association

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Electronic Solutions Division
Interconnect Solutions
<http://www.3M.com/interconnects/>

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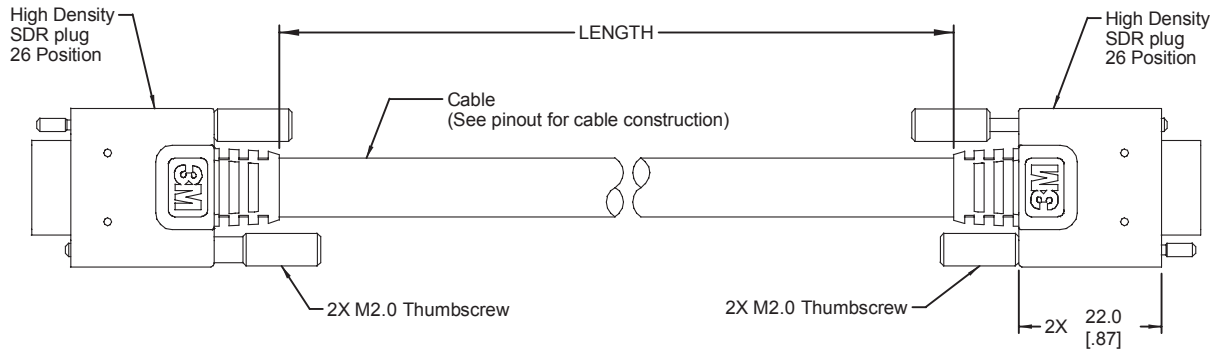


Figure 1
Straight SDR to Straight SDR Cable Assembly
Option 20

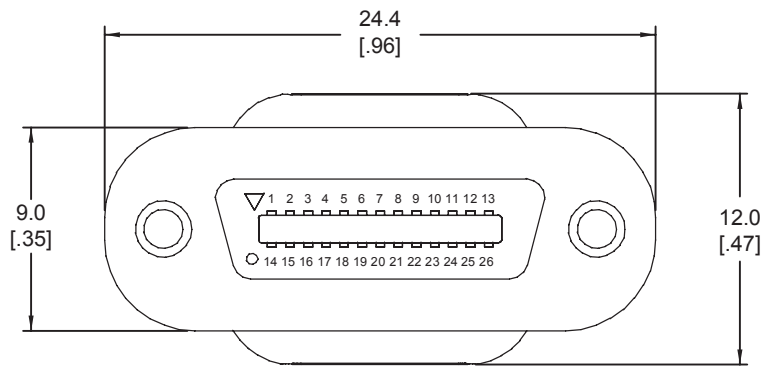


Figure 2
Straight SDR to Straight SDR Cable Assembly

| mm [inch] | | |
|------------------------|------|-------|
| Tolerance Unless Noted | | |
| | .0 | .00 |
| mm | ± .1 | ± .01 |

[] Dimensions used for Reference Only

Note:

1. For length dimension, refer to the product ordering number.



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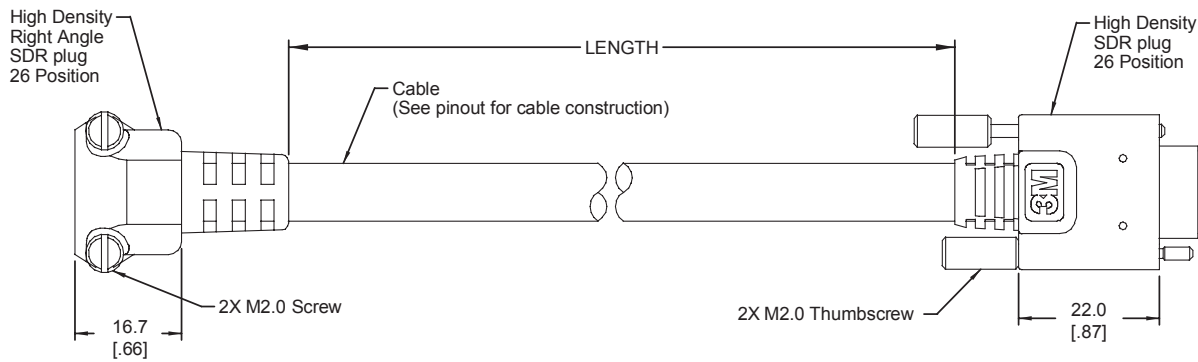


Figure 3
R/A SDR to SDR Cable Assembly
Options 36 & 37

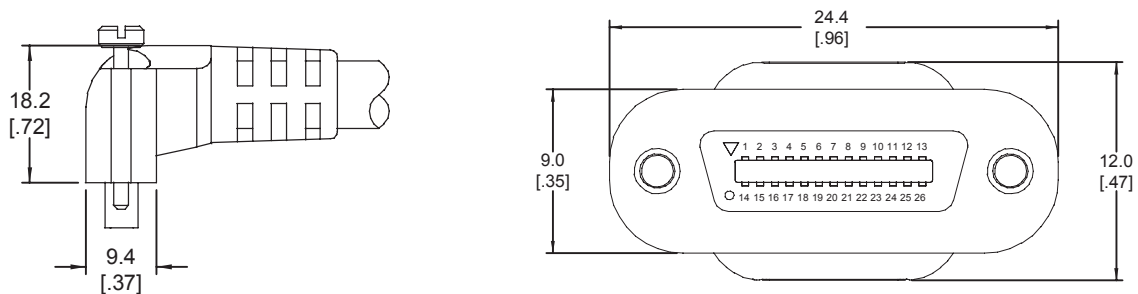


Figure 4
Overmolded R/A SDR Connector

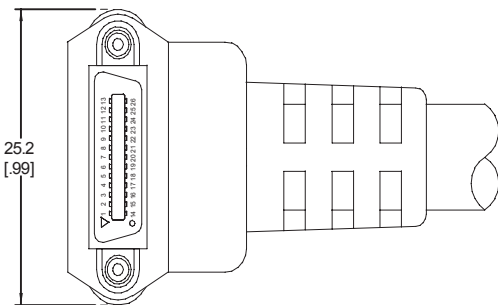


Figure 5
Overmolded R/A SDR Connector
(36 option)

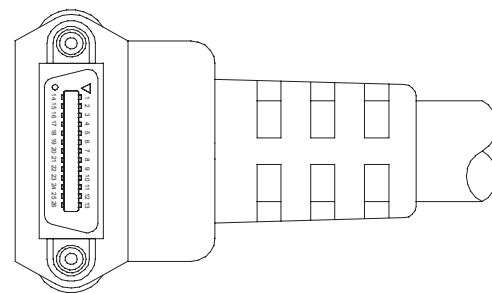


Figure 6
Overmolded R/A SDR Connector
(37 option)

| mm [inch] | | |
|------------------------|------|-------|
| Tolerance Unless Noted | | |
| | .0 | .00 |
| mm | ± .1 | ± .01 |

[] Dimensions used for Reference Only

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3M™ Shrunk Delta Ribbon (SDR) Cable Assembly

.80 mm High Speed Digital Data Transmission, 26 position

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| CN-1 Conn. Pos. | Base Configuration | | | | | CN-2 Conn. Pos. |
|-----------------------|-----------------------------|--------------|------------|--------------|--------------|-----------------------|
| | Full / Medium configuration | | | | | |
| | Cable | | | | | |
| 2 | XO- | YO- | TWINAX 1 | YO- | XO- | 25 |
| 15 | XO+ | YO+ | | YO+ | XO+ | 12 |
| 3 | X1- | Y1- | TWINAX 2 | Y1- | X1- | 24 |
| 16 | X1+ | Y1+ | | Y1+ | X1+ | 11 |
| 4 | X2- | Y2- | TWINAX 3 | Y2- | X2- | 23 |
| 17 | X2+ | Y2+ | | Y2+ | X2+ | 10 |
| 5 | XC- | Yclk- | TWINAX 4 | Yclk- | XC- | 22 |
| 18 | XC+ | Yclk+ | | Yclk+ | XC+ | 9 |
| 6 | X3- | Y3- | TWINAX 5 | Y3- | X3- | 21 |
| 19 | X3+ | Y3+ | | Y3+ | X3+ | 8 |
| 7 | Ser TC+ | 100 ohm | TWINAX 6 | 100 ohm | Ser TC+ | 20 |
| 20 | Ser TC- | Terminated | | Terminated | Ser TC- | 7 |
| 8 | Ser TFG- | ZO- | TWINAX 7 | ZO- | Ser TFG- | 19 |
| 21 | Ser TFG+ | ZO+ | | ZO+ | Ser TFG+ | 6 |
| 9 | CC1- | Z1- | TWINAX 8 | Z1- | CC1- | 18 |
| 22 | CC1+ | Z1+ | | Z1+ | CC1+ | 5 |
| 10 | CC2+ | Z2- | TWINAX 9 | Z2- | CC2+ | 17 |
| 23 | CC2- | Z2+ | | Z2+ | CC2- | 4 |
| 11 | CC3- | Zclk- | TWINAX 10 | Zclk- | CC3- | 16 |
| 24 | CC3+ | Zclk+ | | Zclk+ | CC3+ | 3 |
| 12 | CC4+ | Z3- | TWINAX 11 | Z3- | CC4+ | 15 |
| 25 | CC4- | Z3+ | | Z3+ | CC4- | 2 |
| 1 | INNER SHIELD | INNER SHIELD | DRAIN WIRE | INNER SHIELD | INNER SHIELD | 1 |
| 14 | INNER SHIELD | INNER SHIELD | | INNER SHIELD | INNER SHIELD | 14 |
| 13 | INNER SHIELD | INNER SHIELD | | INNER SHIELD | INNER SHIELD | 13 |
| 26 | INNER SHIELD | INNER SHIELD | | INNER SHIELD | INNER SHIELD | 26 |
| Shell | BRAID SHIELD | | | | | Shell |

Table 1
Cable Assembly Wiring Diagram

Ordering Information

1SF26-L1XX-00C-XXX (RIA E1 & C1 apply)

20 = SDR straight to SDR straight backshell.

36 = The direction of the cable for the RA SDR connector dresses down with respect to a horizontal board mount connector. The topology for the 36 option is a straight overmolded SDR backshell to a R/A overmolded SDR backshell.

37 = The direction of the cable for the RA SDR connector dresses up with respect to a horizontal board mount connector. The topology for the 37 option is a straight overmolded SDR backshell to a R/A overmolded SDR backshell.

Length :
100 = 1m
200 = 2m
500 = 5m
A00 = 10m

Refer to length dimension in figures 1 & 3
Reference notes 1 & 2 for cable length tolerance

Notes:

- For a cable length of less than 2m, the length tolerance is +50mm / -0mm
- For a cable length of 2m or more, the length tolerance is +3% / -0% of cable length

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