



# INTERNAL CAMERA LINK CABLES

## INTERNAL RIBBON CABLE APPLICATIONS

### PART NUMBER REFERENCE



### Select Connector Type: End "1"

- MDR Female Straight Exit = 1
- MDR Male Low Profile R/A Exit **UP** = 2
- MDR Male Low Profile R/A Exit **DOWN** = 3
- HDR / SDR Male Low Profile R/A Exit **UP** = 4
- HDR / SDR Male Low Profile R/A Exit **DOWN** = 5
- MDR Male Straight Exit = 6
- HDR / SDR Female R/A **UP** w/Standoffs = 7
- HDR / SDR Female R/A **DOWN** w/Standoffs = 8
- HDR / SDR Male Straight Exit Recessed Screws = 9

### Cable Type Options.

- Pleated Foil Shielded Ribbon = 1

### Select Connector Type: End "2"

- MDR Female Straight Exit = 1
- MDR Male Low Profile R/A Exit **UP** = 2
- MDR Male Low Profile R/A Exit **DOWN** = 3
- HDR / SDR Male Low Profile R/A Exit **UP** = 4
- HDR / SDR Male Low Profile R/A Exit **DOWN** = 5
- MDR Male Straight Exit = 6
- HDR / SDR Female R/A **UP** w/Standoffs = 7
- HDR / SDR Female R/A **DOWN** w/Standoffs = 8
- HDR / SDR Male Straight Exit Recessed Screws = 9

#### Physical:

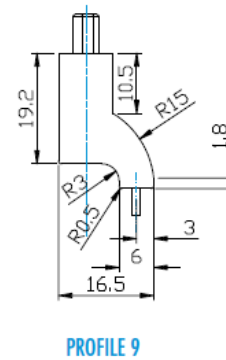
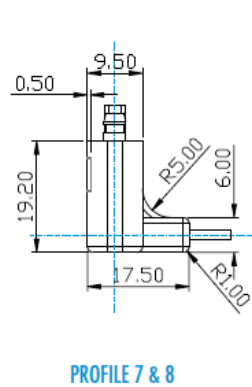
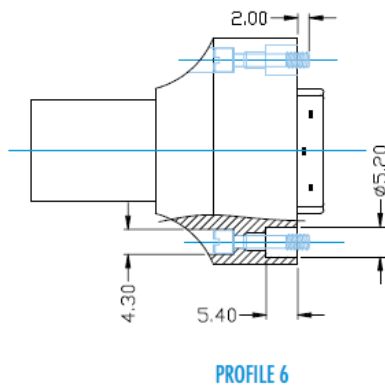
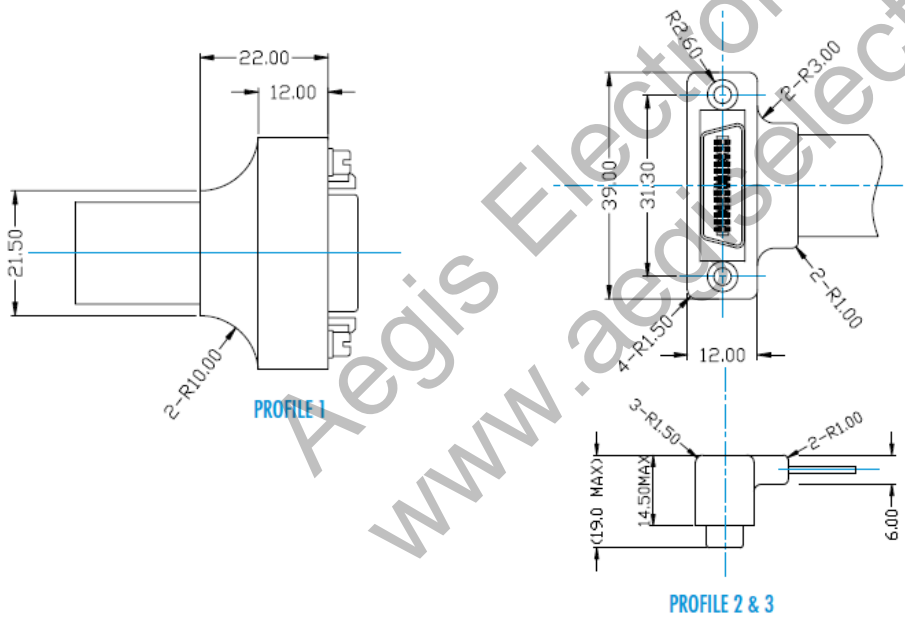
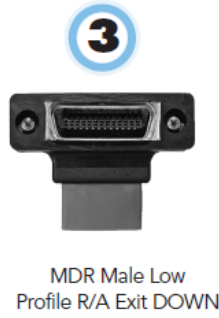
- Cable Color: Gray
- Shell Color: Black
- Shell Construction: Pre-molded in Polyethylene, fully shielded and over-molded in black PVC.
- Cable construction: Utilizes pleated foil shielded ribbon

### Option: Length in Meters

ICL Ribbon Cables are currently available in a standard length of 0.2 to 0.6 meters (8" to 24"). Call for custom length applications.

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# CONNECTOR TYPE OPTIONS:

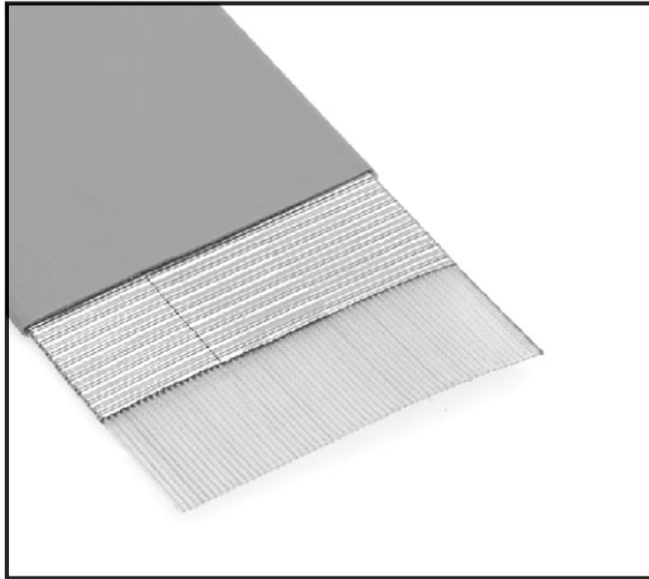


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**COMPONENTS EXPRESS, INC.**  
10330 Argonne Woods Drive, Ste100  
Woodridge, IL 60517

**ICL Cable Type #: 1**  
**OEM Rev. C, 9/3/2013**



- Can be used with IDC mass termination connectors
- Can be used in applications requiring standard impedance of 100  $\Omega$  balanced (differential)
- Perfect for board-to-board applications within electronic equipment, TPE covering prevents pleated copper foil from accidental shorting
- Solid pleated copper foil provides flexibility and 35 db average shielding effectiveness
- See Regulatory Information Appendix (RIA) for chemical compliance information (RIA E1 & C1 apply)

Date Modified: September 3, 2013

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## Physical

**Cover Material:** Thermoplastic Elastomer (TPE)  
**Cover Color:** Gray  
**Primary Material:** Thermoplastic Elastomer (TPE)  
**Marking:**  
**Standard:** None  
**Canadian Option:** **RU** AWM 20674 105C 150V VW1 3M NU  
**C** **RU** AWM IA 105C 150V FT1 EU <50V  
**Conductors:** 30 AWG [ 0.254 ] Tinned Solid Copper  
**Shielding:** Solid, Pleated, Copper Foil

## Electrical

**Voltage Rating:** USA: 150V      Canada: 150V      EU: <50V  
**Insulation Resistance:** (Primary Cable)  $> 1 \times 10^{10} \Omega/10 \text{ ft. [ 3 m ]}$   
**Characteristic Impedance:** **Unbalanced**      **Balanced**  
53  $\Omega$       104  $\Omega$   
**Capacitance:** 28.4 pF/ft [ 93.2 pF/m ]      14.5 pF/ft [ 47.6 pF/m ]  
**Inductance:** 0.08  $\mu\text{H/ft}$  [ 0.26  $\mu\text{H/m}$  ]      0.16  $\mu\text{H/ft}$  [ 0.52  $\mu\text{H/m}$  ]  
**Propagation Delay:** 1.52 ns/ft [ 4.99 ns/m ]      1.50 ns/ft [ 4.95 ns/m ]  
**Velocity of Propagation:** 67%      67%

Note: Unbalanced is measured between ground-signal-ground conductors with shield grounded. Balanced is measured between signal conductors within a pair with the shield floating.

## Environmental

**Temperature Rating:** -20°C to +105°C  
**Flammability Rating:** USA: VW-1      Canada: FT1

UL File No.: E42769, Style No.: 20674

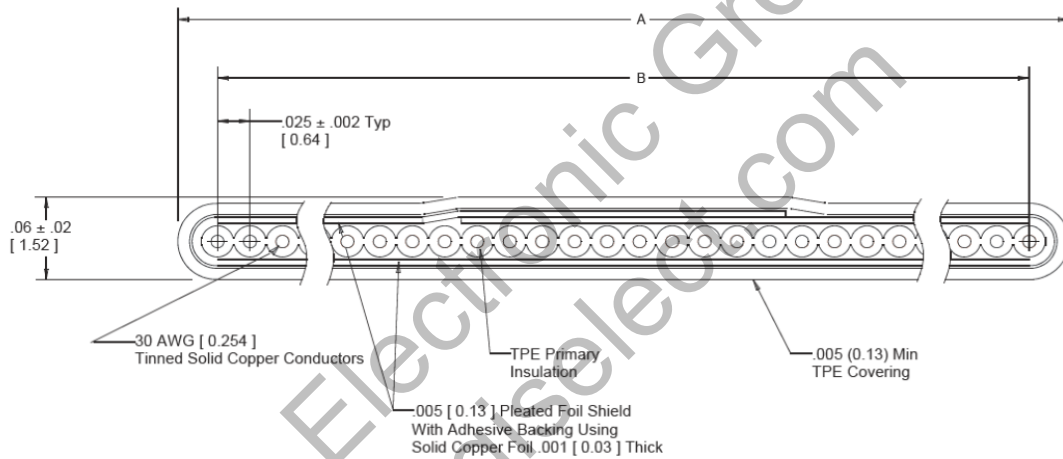


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**ICL Cable Type #: 1**  
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Number of Conductors	3M Part Number	Dimension A	Dimension B
20	90201/20	0.54 [ 13.7 ]	0.475 ± .006 [ 12.06 ]
26	90201/26	0.69 [ 17.5 ]	0.625 ± .006 [ 15.88 ]
36	90201/36	0.94 [ 23.9 ]	0.875 ± .009 [ 22.23 ]
40	90201/40	1.04 [ 26.4 ]	0.975 ± .009 [ 24.77 ]
50	90201/50	1.29 [ 32.8 ]	1.225 ± .009 [ 31.11 ]
60	90201/60	1.54 [ 39.1 ]	1.475 ± .012 [ 37.47 ]
68	90201/68	1.74 [ 44.2 ]	1.675 ± .012 [ 42.55 ]
80	90201/80	2.04 [ 51.8 ]	1.975 ± .015 [ 50.17 ]
100	90201/100	2.54 [ 64.5 ]	2.475 ± .017 [ 62.87 ]



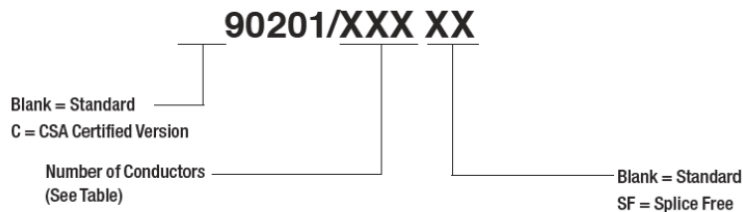
Aegis Electronic Group  
www.aegiselect.com

Tolerance Unless Noted			
	Inch [mm]		
	.0	.00	.000
Inch	±.1	±.05	±.010

[ ] Dimensions for Reference Only

Note: Blue marking on edge of primary cable designates wire #1.

### Ordering Information



Note: Available in standard 100 ft or 300 ft rolls, please specify when ordering. Contact 3M for availability of additional conductor counts and/or custom roll lengths.

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