imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



₹ Tyco Electronics

Series 1.0/2.3 (50 Ohm/75 Ohm)



Miniature coaxial connectors series 1.0/2.3 (CECC 22230 and IEC 61169-29) coaxial connectors are devised to meet the requirements of compact electronic instrumentation. All plugs and jacks with $Z_{\Omega} = 50 \ \Omega$ are designed for a number of different 50 Ω and 75 Ω cables. Owing to the large demand, the Series 1.0/2.3 has also been optimized as a 75 Ω design into the GHz range. The different types of coupling mechanisms, such as screw on, slide-in and latching coupling permit space-saving installation.

In addition, an extensive range of measurement

accessories, adapters as well as terminations is available. The qualitydetermining factors have been established on the basis of corresponding measurements and test procedures in accordance with national and international standards for RF connectors (IEC 61169-1, MIL-C-39012 etc.).

High-quality materials ensure high reliability even in industrial atmospheres. The contact principle is the pin-socket principle and the contacts are gold plated to ensure perfect contact mating. The inner conductor parts are held in PTFE (Polytetrafluoroethylene). The reduced dimensions of all component parts of these connectors permit a compact hole spacing (installation pitch) of 6.8 [0.27] depending upon the corresponding cable diameters.

The cable is connected by crimping the cable braid to the plug or jack body, the inner conductor is soldered or crimped.

In most applications, the plug and jack belong to the same coupling type group. In special instances, such as for measurement purposes, different coupling types can be used together.

Between Series Adapters For Series 1.0/2.3 Adapters please see

pages 251-260.

Catalog 1307191 Revised 3-07

www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

Coupling Types

Series 1.0/2.3 (50 Ohm/75 Ohm) (Continued)

Technical Data

₹ Tyco

Electrical and mechanical characteristics in accordance with CECC 22230

Characteristic impedance — $50 \ \Omega/75 \ \Omega$

Frequency range — up to 10 GHz/ 2 GHz

Reflection factor, referred to 50 Ω cable¹ — up to 1 GHz, r ≤ 0.05

up to 4 GHz, $r \le 0.07$ up to 10 GHz, $r \le 0.15$ **Reflection factor, referred to**

75 Ω cable¹ up to 2 GHz, r \leq 0.10

Insulation resistance initial value $\ge 1 \text{ G}\Omega$ after stressing $\ge 200 \text{ M}\Omega$

Screening effectiveness² — $\ge 90 \text{ dB}$

Inner conductor contact resistance

- after stressing $\leq 10 \text{ m}\Omega$ **Outer conductor continuity** - after stressing $\leq 7.5 \text{ m}\Omega$

Voltage proof³ flexible cables (RG 316) — at sea level, 750 V, 50 Hz — at 20 km altitude, 150 V, 50 Hz

Working voltage³ —

flexible cables (RG 316) — at sea level, 350 V, 50 Hz

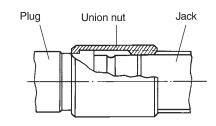
— at 20 km altitude, 65 V, 50 Hz Service life — 500 cycles

Climatic category - 40/85/21

Notes:

¹ Guide values, depending on cable type and connector style.

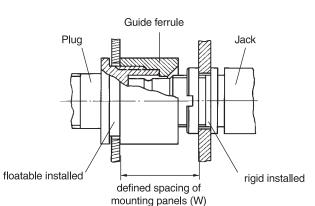
- ² Values apply to a straight screw and latching coupling with suitable cable.
- ³ Some cables suitable for use with these connectors have lower characteristic values than specified here.
- ⁴ For applicable cable types see page 151.



Туре А

Screw coupling; version with union nut

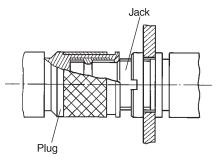
This type permits the plug and jack to be screwed together manually by means of a union nut secured to the plug. This is necessary for readily accessible locations, front panel test points and cable connections.



Type C

Slide-in coupling; version with centering ferrule

In this type of coupling, the plug features a guide ferrule with a conical entry surface. This ensures that the floatable bulkhead plugs with cable connection make a reliable electrical connection to the rigid installed jack. Examples of this are single and multi-contact connections of slide-in applications. "W" denotes the allowed spacing of the mounting panel for satisfactory contact when the connection is made.



Type F

Latching coupling (Quick Lock)

In this version, the cable plugs bear a funnel ferrule with built-in spring which snaps into a groove on the jack, simultaneously locking the connection. The connection can be easily separated by lightly pulling the outer sleeve of the plug. This type of coupling can be used with a higher packing density, as the screw coupling.

130

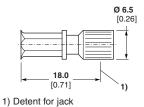
Catalog 1307191 Revised 3-07

sp www.tycoelectronics.com are

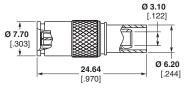
Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

Series 1.0/2.3, 50 Ohm

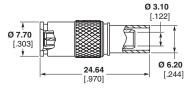
Plugs, Solder/Crimp



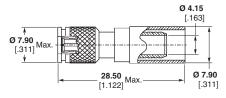
| Cable | Coupling Type | Ø Max. | Part No. |
|--------|---------------|----------------------|-----------|
| RG 316 | А | 2.67 0.105 | 1393670-1 |



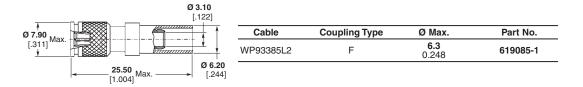
| Cable | Coupling Type | Ø Max. | Part No. |
|-----------|---------------|----------------------|----------|
| WP93385L2 | F | 2.67 0.105 | 619223-1 |



| Cable | Coupling Type | Ø Max. | Part No. |
|---------|---------------|----------------------|----------|
| LMR 240 | F | 2.67 0.105 | 619224-1 |



| Cable | Coupling Type | Ø Max. | Part No. |
|-----------|---------------|---------------------|-----------|
| LMR 240FR | F | 6.3 0.248 | 1460010-1 |



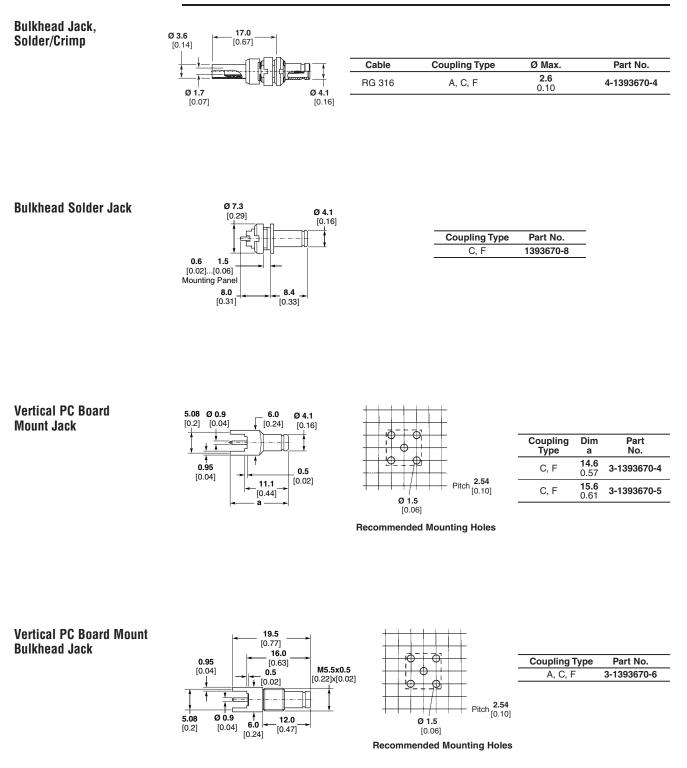
Note: Part Numbers are RoHS compliant except:
Indicates non-RoHS compliant.

Catalog 1307191 Revised 3-07 www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

₹ Tyco Electronics

Series 1.0/2.3, 50 Ohm (Continued)

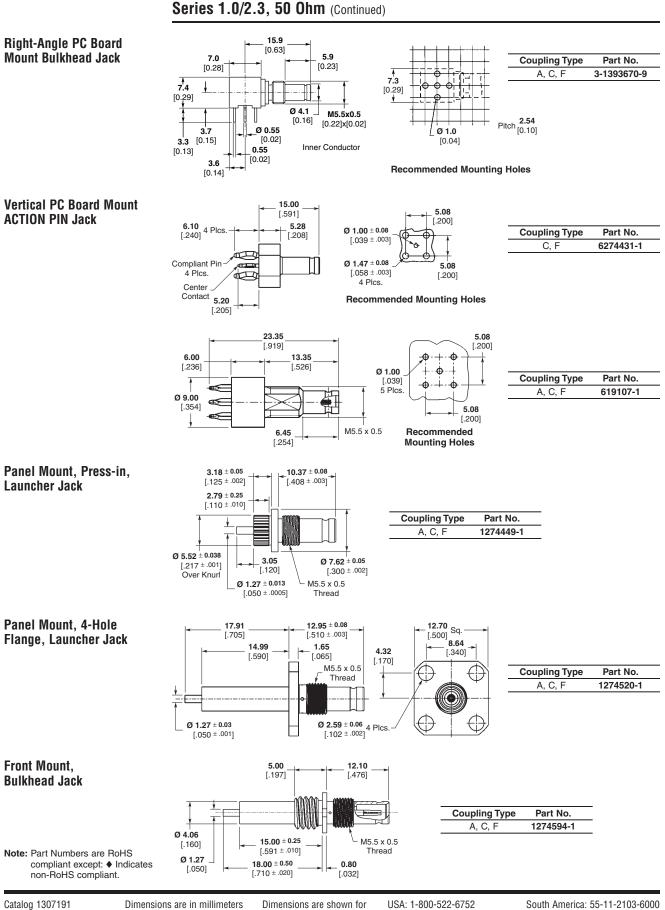


Note: Part Numbers are RoHS compliant except:
 Indicates non-RoHS compliant.

Catalog 1307191 Revised 3-07 www.tycoelectronics.com

132

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803



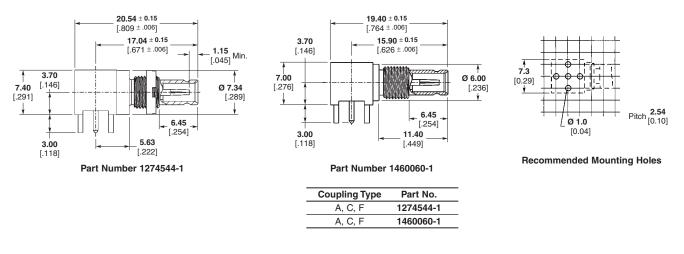
www.tycoelectronics.com

Revised 3-07

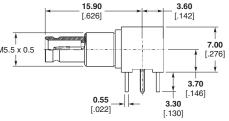
Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803 South America: 55-11-2103-6000 Hong Kong: 852-2735-1628 Japan: 81-44-844-8013 UK: 44-8706-080-208

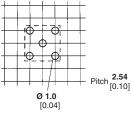
Series 1.0/2.3, 50 Ohm (Continued)

Right-Angle PC Board Mount Bulkhead Jack









Recommended Mounting Holes

Series 1.0/2.3, 75 Ohm

Plugs, Solder/Crimp

| Ø 6.5 [0.26] | |
|----------------------------------|--|
| | |
| 18.0 [0.71] 1) | |
| 1) Detent for jack | |

| Cable | Coupling Type | Ø Max. | Part No. |
|--------|---------------|----------------------|-------------|
| RG 179 | А | 2.67 0.105 | 5-1393670-5 |

| 26 [1.02] | Ø 7.9 [0.03] |
|---------------------|-----------------|
| | + |
| | - |
| | _ Y |

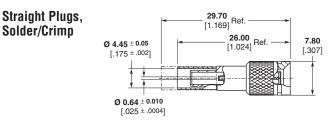
| Cable | Coupling Type | Ø Max. | Part No. |
|-----------------------|---------------|----------------------|-------------|
| RG 179 | F | 2.67 0.105 | 6-1393670-2 |
| ST 212 | F | 3.2 0.13 | 6-1393670-5 |
| 02Y(St)CY 0.45/2.0 | F | 3.6 0.14 | 6-1393670-4 |

Note: Part Numbers are RoHS compliant except:
 Indicates non-RoHS compliant.

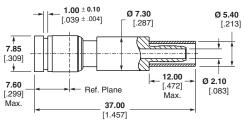
Catalog 1307191 Revised 3-07 www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

Series 1.0/2.3, 75 Ohm (Continued)

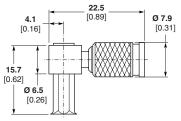


| Cable | Coupling Type | Ø Max. | Part No. |
|-----------------|---------------|----------------------|----------|
| BELDEN 1855A | A, C, F | 2.67 0.105 | 619226-1 |

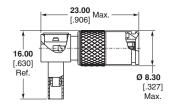


| Cable | Coupling Type | Ø Max. | Part No. |
|---------|---------------|----------------------|-----------|
| BT 3002 | A, C, F | 2.67 0.105 | 1460815-1 |

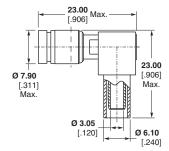
Right-Angle Plug, Solder/Crimp



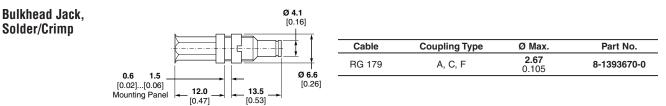
| Cable | Coupling Type | Ø Max. | Part No. |
|-----------------------|---------------|----------------------|-------------|
| RG 179 | F | 2.67 0.105 | 2-1393670-6 |
| 02Y(St)CY 0.45/2.0 | F | 3.6 0.14 | 7-1393670-0 |



| Cable | Coupling Type | Ø Max. | Part No. |
|--------|---------------|---------------------|----------|
| RG 316 | F | 2.8 0.110 | 619228-1 |



| Cable | Coupling Type | Ø Max. | Part No. |
|---------|---------------|----------------------|-----------|
| RA 7000 | A, C, F | 2.67 0.105 | 1460817-1 |



BELDEN is a trademark of Belden Wire and Cable Company.

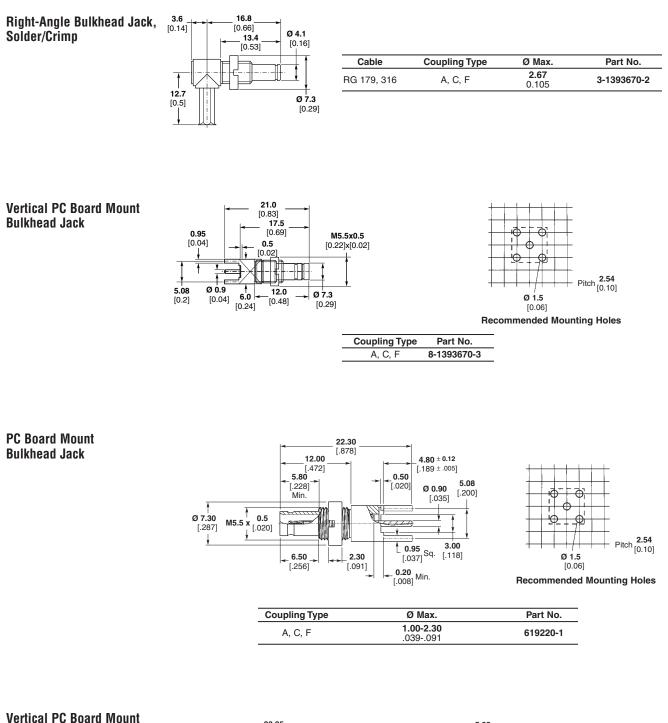
Note: Part Numbers are RoHS compliant except:
Indicates non-RoHS compliant.

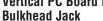
Catalog 1307191 Revised 3-07

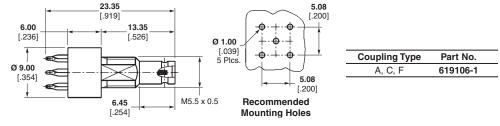
www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

Series 1.0/2.3, 75 Ohm (Continued)







Note: Part Numbers are RoHS compliant except:
 Indicates non-RoHS compliant.

Catalog 1307191 Revised 3-07 www.tycoelectronics.com

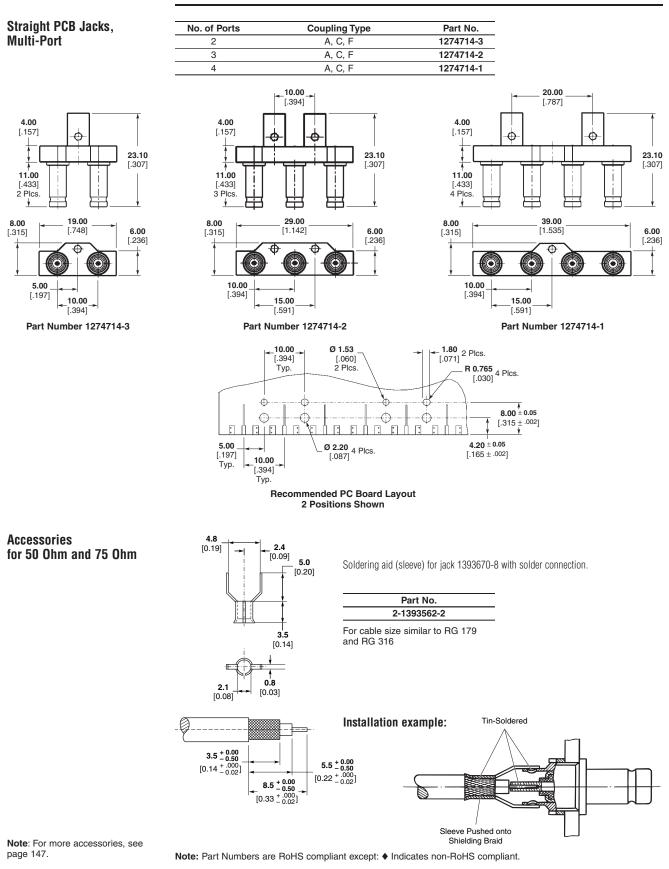
136

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets n are standard equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

₹ Тусо

Electronics

Series 1.0/2.3, 75 Ohm (Continued)



Catalog 1307191 Revised 3-07

www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803 South America: 55-11-2103-6000 Hong Kong: 852-2735-1628 Japan: 81-44-844-8013 UK: 44-8706-080-208

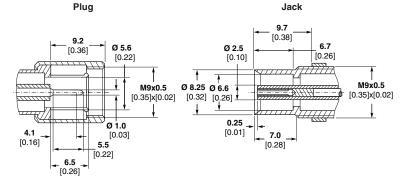
Series 1.6/5.6 mS (75 0hm)



General

The Series 1.6/5.6 mS connectors have been modified to incorporate improved technical advantages. Transmission values have been greatly improved while maintaining the proven positive characteristics of the previous generations. All types of this new "third generation" Series 1.6/5.6 mS connectors are connection-compatible with their predecessor.

Today's PCM technology demands place the Series 1.6/5.6 mS connectors as a most suitable component for transmission of high bit rates. Connectors are available in straight and angled versions as well as with different mechanisms for screw (type A), snap-on (type B), slide-in (type C), and latching (type F) coupling. All connectors of different coupling mechanisms are compatible with each other.



The connectors are designed according to the pin-socket principle. The contacts are partially goldplated, ensuring long service life and stable contact resistance for a high number of intermateability cycles.

The inner conductor parts are secured so that they cannot be displaced. The insulating parts are made of PEEK (polyetheretherketone) or PC (polycarbonate). The cable inner conductors are soldered on, while the outer conductors are screwed or crimped on. Also, cable clamp which is independent of the braid clamping secures the connection point against tensile stressing for both methods of connection.

In addition, assemblyfriendly connectors with full crimp and IDC (Insulation Displacement Contact) connection are included within the scope of delivery. The connectors are characterized by high mechanical strength and low space requirement.

Connection possibilities exist for a number of different cables, including highly-flexible cable types (with foam insulation) with low attenuation or small diameter. Terminations and adapters (see also measurement accessories) round out the spectrum.

Between Series Adapters

₹ Тусо

Electronics

For Series 1.6/5.6 Adapters please see pages 253-262.

138

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

Technical data

Coupling Types

Electrical and mechanical characteristics in accordance with CECC 22240 Characteristic impedance — 75 Ω Frequency range — up to 8 GHz

Reflection factor¹, referred to —

flexible cables, straight types up to 1 GHz, $r \le 0.02$ up to 4 GHz, $r \le 0.06$ up to 8 GHz, $r \le 0.10$ flexible cables, angled types up to 1 GHz, $r \le 0.04$ up to 2 GHz, $r \le 0.06$ up to 4 GHz, $r \le 0.10$ **Insulation resistance** —

initial value, $\geq 10 \text{ G}\Omega$ after stressing, $\geq 1 \text{ G}\Omega$

Screening effectiveness — (straight screw connector at 1 GHz) \geq 100 dB

Inner conductor contact

 $\begin{array}{l} \mbox{resistance} & - \mbox{after stressing} \leq 8 \ m\Omega \\ \mbox{Outer conductor continuity} & - \mbox{after stressing} \leq 4 \ m\Omega \\ \end{array}$

Voltage proof² flexible cables (RG 59) at sea level, 1.5 kV, 50 Hz at 20 km altitude, 300 V, 50 Hz

Working voltage² -

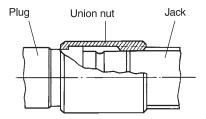
flexible cables (RG 59) at sea level, 500 V, 50 Hz at 20 km altitude, 125 V, 50 Hz

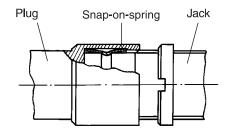
Service life — 500 cycles

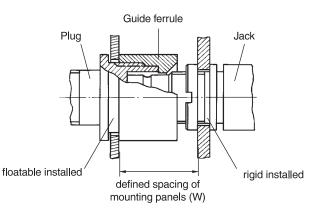
Climactic category — 40/85/21

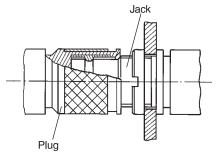
Notes:

- Guideline values, depending on cable type and connector style.
 Some cable types suitable for use
- Some cable types suitable for use with these connectors have lower characteristic values than specified here.
 For applicable cable types see
- ³ For applicable cable types see page 151.









Type F

Latching coupling (Quick Lock)

In this version, the cable plugs bear a funnel ferrule with built-in spring which snaps into a groove on the jack, simultaneously locking the connection. The connec-

Туре А

Screw coupling; version with union nut

This type permits the plug and jack to be screwed together manually by means of a union nut secured to the plug manually, thus preventing the coupling from being pulled apart. This is necessary for readily accessible locations, front panel test points and cable connections.

Туре В

Snap-on coupling (push-pull)

Connectors of this type offer fast make/break. They can be used for test and maintenance applications and also if there is lack of space and connectors with screw coupling cannot be used.

Type C

Slide-in coupling; version with centering ferrule

In this type of coupling, the plug features a guide ferrule with a conical entry surface. This ensures that the floatable bulkhead plugs with cable connection make a reliable electrical connection to the rigid installed jack. Examples of this are single and multi-contact connections of slide-in applications. "W" denotes the allowed spacing of the mounting panel for satisfactory contact when the connection is made.

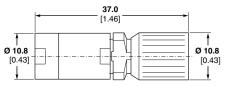
tion can be easily separated by lightly pulling the outer sleeve of the plug. This type of coupling provides the same amount of axial tensile strength as the screw coupling, but can be used with a higher packing density.

Catalog 1307191 Revised 3-07

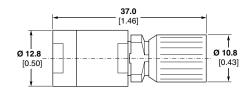
www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

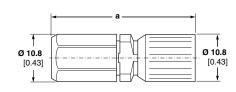
Plugs, Solder/Clamp



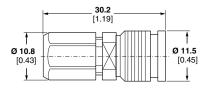
| Cable | Coupling Type | Ø Max. | Part No. |
|------------------|---------------|--------------------|-----------|
| 2YCCY 0.7/4.4 | А | 7.8 0.31 | 1393682-1 |



| Cable | Coupling Type | Ø Max. | Part No. |
|------------------------------------|---------------|--------------------|-----------|
| 2YCCY 1.0/6.5 2YC(mS)CY 1.0/6.5 | A | 9.8 0.31 | 1393682-2 |

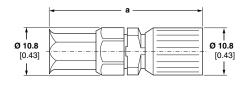


| Cable | Coupling Type | Dim. a | Ø Max. | Part No. |
|-------------------|------------------|---------------------|---------------------|-------------|
| 2YCY 0.4/2.5 | А | 30.7 1.21 | 4.1 0.16 | 1-1393682-1 |
| 2YCCY 0.4/2.5 | А | 30.7 1.21 | 4.8 0.19 | 1-1393682-2 |
| 2YC(mS)CY 0.4/2.5 | А | 30.7 1.21 | 5.0 0.20 | 1-1393002-2 |
| 2YCY 0.7/4.4 | А | 32.9 1.30 | 6.1 0.24 | |
| RG 59 | А | 32.9 1.30 | 6.25 0.25 | 1-1393682-3 |
| 2YC(mS)CY 0.5/3.0 | А | 32.9 1.30 | 6.2 0.24 | |



| Cable | Coupling Type | Ø Max. | Part No. |
|--------------------|---------------|--------------------|-----------|
| 02Y(St)CY 0.45/2.0 | F | 3.6 0.14 | 1393681-8 |

Plugs, Solder/Crimp



| Cable | Coupling Type | Dim. a | Ø Max. | Part No. |
|--------------------|------------------|---------------------|---------------------|-----------|
| RG 179 | А | 32.5 1.28 | 2.6 0.105 | 1393680-2 |
| 2YCCY 0.4/2.5 | А | 32.5 1.28 | 4.8 0.19 | 1202680.2 |
| 2YC(mS)CY 0.4/2.5 | А | 35.5 1.40 | 5.0 0.20 | 1393680-3 |
| 2YC(mS)CY 0.5/3.0 | А | 35.5 1.40 | 6.2 0.24 | 1393680-4 |
| 2YCY 0.7/4.4 | А | 35.5 1.40 | 6.1 0.24 | 1393680-5 |
| 02Y(St)CY 0.45/2.0 | А | 32.5 1.28 | 3.6 0.14 | 1393680-9 |

Note: Part Numbers are RoHS compliant except:
 Indicates non-RoHS compliant.

Catalog 1307191 Revised 3-07 www.tycoelectronics.com

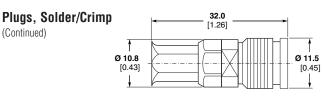
140

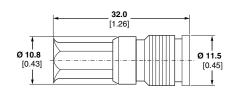
Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents.

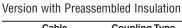
Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

(Continued)

Series 1.6/5.6 mS (75 0hm)



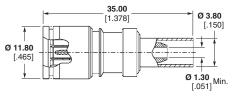




| Cable | Coupling Type | Ø Max. | Part No. |
|--------------------|---------------|--------------------|-----------|
| 02Y(St)CY 0.45/2.0 | F | 3.6 0.14 | 1393672-3 |

Preassembled Isolation Parts

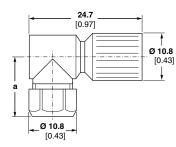
| Cable | Coupling Type | Ø Max. | Part No. |
|--------------------|---------------|--------------------|-----------|
| 02Y(St)CY 0.45/2.0 | F | 3.6 0.14 | 1393672-9 |



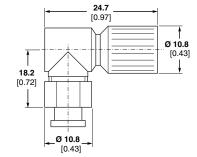
Preassembled Version

| Cable | Coupling Type | Ø Max. | Part No. |
|----------------------|---------------|--------------------|-----------|
| 02YS(St)CHH 0.25/1.2 | F | 2.9 0.11 | 1460132-1 |

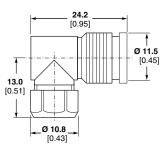
Right-Angle Plugs, Solder/Crimp



| Cable | Coupling Type | Dim. a | Ø Max. | Part No. |
|-------------------|------------------|---------------------|---------------------|-------------|
| 2YCCY 0.4/2.5 | А | 13.0 0.51 | 4.8 0.19 | 2-1393682-0 |
| 2YC(mS)CY 0.4/2.5 | А | 13.0 0.51 | 5.0 0.20 | 2-1393682-0 |
| 2YCY 0.7/4.4 | А | 15.8 0.62 | 6.1 0.24 | |
| RG 59 | А | 15.8 0.62 | 6.25 0.25 | 2-1393682-2 |
| 2YC(mS)CY 0.5/3.0 | А | 15.8 0.62 | 6.2 0.24 | |



| Cable | Coupling Type | Ø Max. | Part No. |
|--------|---------------|----------------------|-------------|
| RG 179 | А | 2.67 0.105 | 2-1393682-3 |



| - | Cable | Coupling Type | Ø Max. | Part No. |
|---|--------------------|---------------|--------------------|-------------|
| | 02Y(St)CY 0.45/2.0 | F | 3.6 0.14 | 1-1393681-0 |

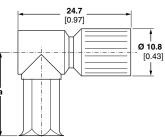
Note: Part Numbers are RoHS compliant except:
 Indicates non-RoHS compliant.

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

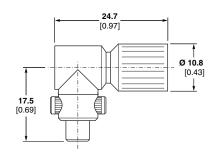
USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803





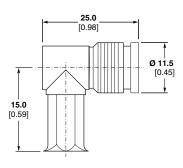
| Cable | Coupling Type | Dim. a | Ø Max. | Part No. |
|----------------------------|------------------|---------------------|--------------------|-------------|
| 02Y12YC(mS)C6Y 0.45/2.0 | А | 15.0 0.59 | 4.0 0.16 | 1-1393680-6 |
| 02Y(St)CY 0.45/2.0 | А | 15.0 0.59 | 3.6 0.14 | 1-1393680-8 |

Right-Angle Plugs, IDC Connection



| Cable | Coupling Type | Ø Max. | Part No. |
|--------------------|---------------|--------------------|-----------|
| 02Y(St)CY 0.45/2.0 | А | 3.6 0.14 | 1393757-9 |
| 2YCY 0.4/2.5 | А | 4.1 0.16 | 1393757-8 |

Right-Angle Plug, Solder/Crimp



| Cable | Coupling Type | Ø Max. | Part No. |
|--------------------|---------------|--------------------|-----------|
| 02Y(St)CY 0.45/2.0 | F | 3.6 0.14 | 1393672-5 |

Bulkhead Jacks, Solder/Clamp

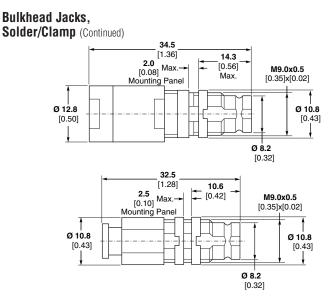
| Р | a | 4 | Cable | Coupling | Dim. | Ø Max. | Part No. |
|-------------|--|----------------------------------|-------------------|----------|---------------------|---------------------|-------------|
| | 14.3 | | | Туре | а | | |
| | 2.0 Max.→ [0.08] Max.→ Mounting Panel Max. | M9.0x0.5 [0.35]x[0.02] | 2YCY 0.4/2.5 | A, B, F | 28.1 1.11 | 4.1 0.16 | 3-1393682-2 |
| ∲ Ø 10.8 | | Ø 10.8 | 2YCCY 0.4/2.5 | A, B, F | 28.1 1.11 | 4.8 0.19 | 3-1393682-3 |
| [0.43] | | | 2YC(mS)CY 0.4/2.5 | A, B, F | 28.1 1.11 | 5.0 0.20 | 5-1555002-5 |
| <u>¥</u> | | Ø 8.2 | 2YCY 0.7/4.4 | A, B, F | 30.4 1.20 | 6.1 0.24 | |
| | | [0.32] | RG 59 | A, B, F | 30.4 1.20 | 6.25 0.25 | 3-1393682-5 |
| | | | 2YC(mS)CY 0.5/3.0 | A, B, F | 30.4 1.20 | 6.2 0.24 | |

Note: Part Numbers are RoHS compliant except:
 Indicates non-RoHS compliant.

Catalog 1307191 Revised 3-07 www.tycoelectronics.com Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

| 1 | 42 |
|---|----|
|---|----|



| Cable | Coupling Type | Ø Max. | Part No. |
|-------------------|---------------|--------------------|-----------|
| 2YCCY 1.0/6.5 | A, B, F | 9.8 0.38 | 1393682-4 |
| 2YC(mS)CY 1.0/6.5 | A, B, F | 9.8 0.38 | 1393002-4 |

| Cable | Coupling Type | Ø Max. | Part No. |
|--------|---------------|----------------------|-------------|
| RG 179 | B, C, F | 2.67 0.105 | 4-1393682-2 |

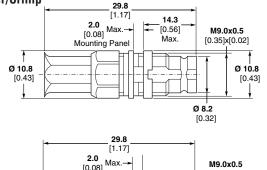
Bulkhead Jacks, Solder

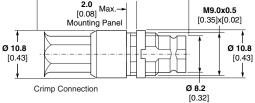
| 3.0 [0.12] Max. | a 19.4 [0.76] [0.47] Mounting Panel | |)x0.5 <[0.02] |
|------------------------------|--|---------------------|-------------------------|
| + + 1.7 [0.07] | | Ø 8.2 [0.32] | Ø 10.8 [0.43] |
| Dim. a | Ø Max. | Par | t No. |

| Dim. a | Ø Max. | Part No. |
|----------------------|------------|-------------|
| 22.3* 0.88 | A, B, C, F | 1-1393681-1 |
| 23.5 0.93 | A, B, C, F | 1-1393681-9 |
| | | |

*Without soldering tags on outer conductor, dimension **a** up to inner conductor end.







| Cable | Coupling Type | Ø Max. | Part No. |
|----------------------------|---------------|----------------------|-------------|
| RG 179 | A, B, F | 2.67 0.105 | 2-1393680-2 |
| 02Y12YC(mS)C6Y 0.45/2.0 | A, B, F | 4.0 0.16 | 2-1393680-4 |
| 06YCC(St)6Y 0.4/1.6 | A, B, F | 3.3 0.13 | 2-1393680-5 |
| 02Y(St)CY 0.45/2.0 | A, B, F | 3.6 0.14 | 1393672-6 |

With preassembled insulation parts

6.5

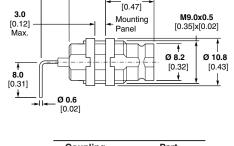
[0.26]

| Cable | Coupling Type | Ø Max. | Part No. |
|--------------------|---------------|--------------------|-------------|
| 02Y(St)CY 0.45/2.0 | A, B, F | 3.6 0.14 | 1-1393672-4 |

Note: Part Numbers are RoHS compliant except:
 Indicates non-RoHS compliant.

www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803 South America: 55-11-2103-6000 Hong Kong: 852-2735-1628 Japan: 81-44-844-8013 UK: 44-8706-080-208 143



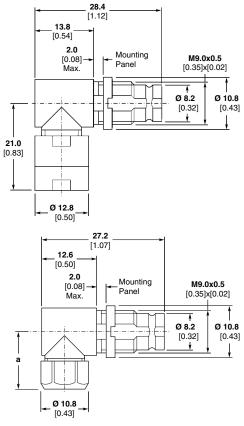
19.4

[0.76] 12.0

| Coupling | Part |
|------------|-------------|
| Type | No. |
| A, B, C, F | 1-1393681-3 |

With preass

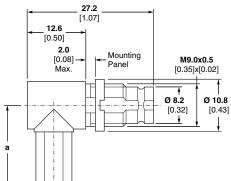
Right-Angle Bulkhead Jack, Solder/Clamp



| Cable | Coupling Type | Ø Max. | Part No. |
|-------------------|---------------|--------------------|-----------|
| 2YCCY 1.0/6.5 | A, B, F | 9.8 0.39 | 1393682-8 |
| 2YC(mS)CY 1.0/6.5 | A, B, F | 9.8 0.39 | 1393002-0 |

| Cable | Coupling Type | Dim. a | Ø Max. | Part No. |
|--------------------|------------------|---------------------|---------------------|-------------|
| 02Y(St)CY 0.45/2.0 | A, B, F | 13.0 0.51 | 3.6 0.14 | 4-1393682-9 |
| 2YCCY 0.4/2.5 | A, B, F | 13.0 0.51 | 4.8 0.19 | 4-1393682-6 |
| 2YC(mS)CY 0.4/2.5 | A, B, F | 13.0 0.51 | 5.0 0.20 | 4-1393082-0 |
| 2YCY 0.7/4.4 | A, B, F | 15.8 0.62 | 6.1 0.24 | |
| RG 59 | A, B, F | 15.8 0.62 | 6.25 0.25 | 4-1393682-8 |
| 2YC(mS)CY 0.5/3.0 | A, B, F | 15.8 0.62 | 6.2 0.24 | |

Right-Angle Bulkhead Jack, Solder/Crimp



| Cable | Coupling Type | Dim. a | Ø Max. | Part No. |
|----------------------------|------------------|---------------------|----------------------|-------------|
| RG 179 | A, B, F | 15.0 0.59 | 2.67 0.105 | 3-1393680-0 |
| 2YCCY 0.4/2.5 | A, B, F | 15.0 0.59 | 4.8 0.19 | 3-1393680-2 |
| 2YC(mS)CY 0.4/2.5 | A, B, F | 15.0 0.59 | 5.0 0.20 | 3-1393680-2 |
| 02Y12YC(mS)C6Y 0.45/2.0 | A, B, F | 15.0 0.59 | 4.0 0.16 | 3-1393680-5 |
| 06YCC(St)6Y 0.4/1.6 | A, B, F | 15.0 0.59 | 3.3 0.13 | 4-1393682-3 |
| 02Y(St)CY 0.45/2.0 | A, B, F | 15.0 0.59 | 3.6 0.14 | 3-1393680-7 |

27.2 [1.07] Max. Ŧ Ø 10.8 [.43] Ø 8.2 [.32] M9 x 0.5 [.35 x .02] 1.35 Min. [.053] 3.80 ----[.150]

| Cable | Coupling Type | Dim. a | Ø Max. | Part No. |
|----------------------|------------------|---------------------|--------------------|-------------|
| 02YS(St)CHH 0.25/1.2 | 2 A, B, F | 15.0 0.59 | 2.9 0.11 | 1460128-1* |
| 02YS(St)CHH 0.25/1.2 | 2 A, B, F | 15.0 0.59 | 2.9 0.11 | 1460169-1** |

* Tray Packaging. ** Individual Packaging.

Note: Part Numbers are RoHS compliant except:
 Indicates non-RoHS compliant.

Catalog 1307191 Revised 3-07 www.tycoelectronics.com

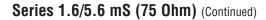
144

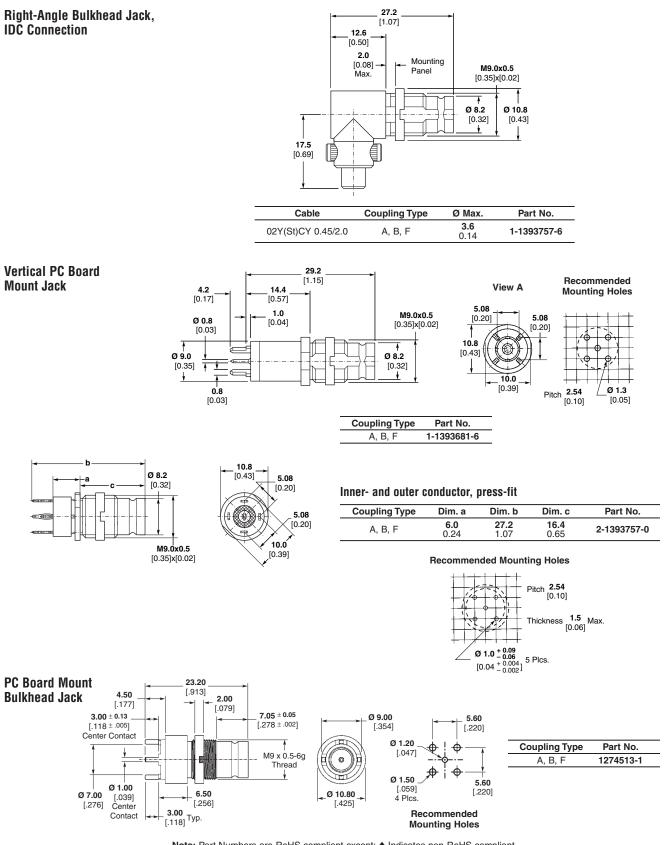
Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

₹ Tyco Electronics





Note: Part Numbers are RoHS compliant except:
Indicates non-RoHS compliant.

Catalog 1307191 Revised 3-07

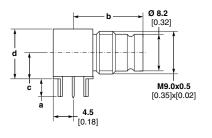
www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803 South America: 55-11-2103-6000 Hong Kong: 852-2735-1628 Japan: 81-44-844-8013 UK: 44-8706-080-208



Series 1.6/5.6 mS (75 Ohm) (Continued)

Right-Angle PC Board Mount Bulkhead Jack



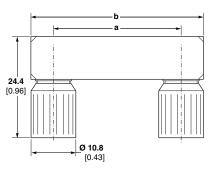
| +-+- | | 1 | | $\left \right $ |
|----------------|-------|----|-------|------------------|
| | | | = =, | - |
| | Í 🔶 | Ť | | i. |
| | Þ-Ľ | ╞╫ | | 11 |
| 17 | | | | \square |
| _/ | | | ð 1.3 | |
| Øe 4 Plcs. | | | | 9] |
| Pitch [0.10] | | | | |
| Ø e 4 Plcs. | Pitch | | [0.05 | |

Recommended Mounting Holes

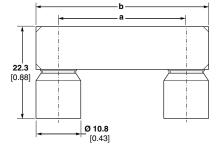
| Coupling Type | Dim. a | Dim. b | Dim. c | Dim. d | Dim. e | Part No. |
|------------------|--------------------|---------------------|--------------------|----------------------|--------------------|--------------|
| A, B, F | 4.0 0.16 | 16.0 0.63 | 6.0 0.24 | 10.75 0.42 | 1.3 0.05 | 2-1393681-1 |
| A, B, F | 3.3 0.13 | 16.0 0.63 | 6.0 0.24 | 10.75 0.42 | 1.3 0.05 | 2-1393681-2 |
| A, B, F | 3.7 0.15 | 22.9 0.90 | 6.45 0.25 | 11.25 0.44 | 1.8 0.07 | 2-1393681-3* |

*With positioning and snap-on system onto PC board

U-link Plug/Plug



| Coupling Type | Dim. a ± 0.1 [0.004] | Dim. b Max. | Part No. |
|---------------|-------------------------|---------------------|-------------|
| A | 15.0 0.59 | 26.5 1.04 | 6-1460823-1 |



| Coupling Type | Dim. a ± 0.1 [0.004] | Dim. b Max. | Part No. |
|---------------|-------------------------|---------------------|-------------|
| В | 15.0 0.59 | 26.5 1.04 | 6-1460823-2 |

Note: Part Numbers are RoHS compliant except:
Indicates non-RoHS compliant.

Catalog 1307191 Revised 3-07 www.tycoelectronics.com

146

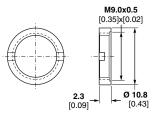
Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803



Accessories

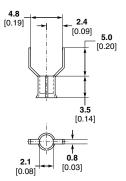
These components are provided when bulkhead jack part numbers are ordered, but can also be ordered separately.



Threaded ring for installation of bulkhead jacks

_

| Part No. |
|-------------|
| 1-1393562-0 |
| |



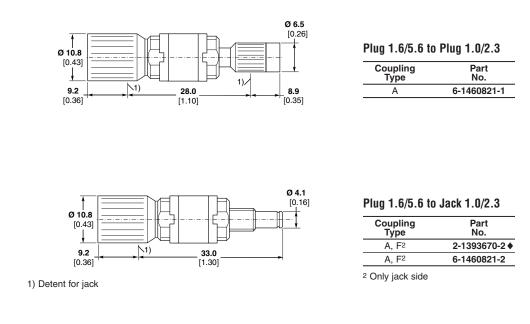
Soldering aid (sleeve) for jack (1-1393681-9) with solder termination

| Part No. | | | |
|------------------------------------|--|--|--|
| 2-1393562-2 | | | |
| atolina in a sea di in ata llatian | | | |

Cable stripping and installation example: see Part number 2-1393562-2 under "Series 1.0/2.3", page 137.

Measurement Accessories

Between Series Adapters (75 Ohm)



Note: Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

Catalog 1307191 Revised 3-07 www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

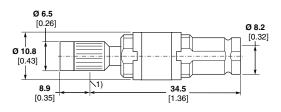
Hong Kong: 852-2735-1628 Japan: 81-44-844-8013

UK: 44-8706-080-208

Measurement Accessories (Continued)

Between Series Adapters

(75 Ohm) (Continued)



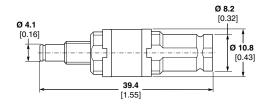
1) Detent for jack

| Plug | 1.0/2.3 | to Jack | 1.6/5.6 |
|------|---------|---------|---------|
|------|---------|---------|---------|

| Coupling | Part |
|------------------------------------|-------------|
| Type | No. |
| A, B ² , F ² | 6-1460821-3 |

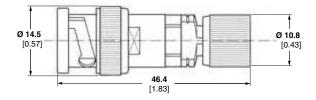
² Only jack side

A, B, F

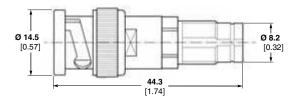


| Jack 1.0/2.3 to |) Jack 1.6/5.6 |
|-----------------|----------------|
| Coupling | Part |
| Type | No. |

6-1460821-4



| BNC | Plug to Plug 1.6/5.6 | |
|-----|----------------------|--|
| | Part No. | |
| | 7-1393665-4 | |



| BNC | Plug | to | Jack | 1. | .6/5.6 | ì |
|-----|------|----|------|----|--------|---|
|-----|------|----|------|----|--------|---|

| 7-1393665-6 | Part No. |
|-------------|-------------|
| 1 1000000 0 | 7-1393665-6 |

Note: Part Numbers are RoHS compliant except:
 Indicates non-RoHS compliant.

Catalog 1307191 Revised 3-07 www.tycoelectronics.com

148

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents.

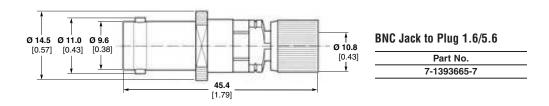
Dimensions are shown for reference purposes only. Specifications subject to change.

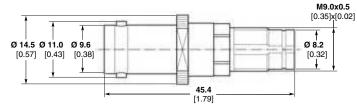
USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

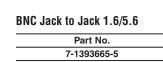
Measurement Accessories (Continued)

Between Series Adapters

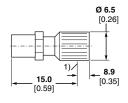
(75 Ohm) (Continued)



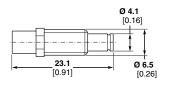




Termination (75 Ohm)



1) Detent for jack



Standard Termination

| Plug | 1.0/2.3 |
|------|---------|
|------|---------|

| Coupling | Power | Part |
|----------|-------|-------------|
| Type | W | No. |
| A | 0.6 | 7-1393665-2 |

| • | Jack 1.0/2.3 | | |
|---|------------------|------------|-------------|
| | Coupling Type | Power W | Part No. |
| | A, F | 0.6 | 7-1393665-3 |

| ≤29.6 ► | |
|----------------|------------------|
| | Ø 10.8 [0.43] |

| Plug | 1.6/5.6 |
|------|---------|
|------|---------|

| Coupling Type | Power W | Part No. |
|------------------|------------|-------------|
| А | 1.0 | 6-1393665-1 |
| | | |

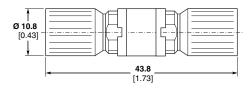
Note: Part Numbers are RoHS compliant except:
 Indicates non-RoHS compliant.

Catalog 1307191 Revised 3-07 www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803 149

Measurement Accessories (Continued)

In-Series Adapter (75 Ohm)



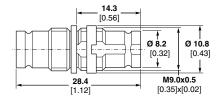
| Coupling Part Type No. | Adapter 1.6/5.6 | 6, Plug/Plug |
|---------------------------|-----------------|--------------|
| ,1 | Coupling | |
| | туре | 1393681-6 |

| | l.a | 41.3 | | |
|------------------------------|-----|--------|------------------------|---|
| | | [1.63] | | |
| Ø 10.8 [0.43] ↓ | | | Ø 8.2 [0.32] | |
| | | | M9.0x0.5 | |
| | | | [0.35]x[0.02 |] |

| Adapter 1 | .6/5.6. | Plug/Jack |
|-----------|---------|-----------|
|-----------|---------|-----------|

| Coupling | Part | | | | |
|-----------|-------------|--|--|--|--|
| Type | No. | | | | |
| A, B*, F* | 1-1393681-7 | | | | |

*Jack side only



| Coupling | Part |
|----------|-------------|
| Type | No. |
| A, B, F | 1-1393665-1 |

Note: U-link connectors see "1.6/5.6" section, page 146.

Note: Part Numbers are RoHS compliant except:
Indicates non-RoHS compliant.

Catalog 1307191 Revised 3-07 www.tycoelectronics.com

150

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets m are standard equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

Coaxial Cables

List of the coaxial cables that are listed in the various connector series of this section.

| Characteristic | Max. Cable | Dielectric Diemeter (mm)/ | Cable-Type Designation | | | | | |
|------------------------|---------------------|---|-------------------------------|-------------------------------------|---------------------------|--|--|--|
| Impedance (Ω) | Outer Diameter (mm) | Dielectric Diameter (mm)/ Material ¹⁾ | VDE Designation ²⁾ | US Designation Manufacturer des. | IEC Designation 96-IEC | | | |
| 50 | 1.9 | 0.91max/PTFE | 5YC5Ye 0.3/0.86 | RG 178 | 50-1-1 | | | |
| 50 | 2.1 | 0.87/PTFE | _ | RG 196 | 50-1-2 | | | |
| 50 | 2.25 | 1.71max/PTFE | 5YK 0.51/1.68 | RG 405 | _ | | | |
| 50 | 2.6 | 1.60max/PTFE | 5YC5Ye 0.5/1.5 | RG 316 | 50-2-1 | | | |
| 50 | 2.8 | 1.60max/PE | 2YCY 0.5/1.5 | RG 174 | _ | | | |
| 50 | 3.0 | 1.52/PTFE | 5YCC5Y 0.5/1.5 | RD 316 | _ | | | |
| 50 | 3.6 | 3.01max/PTFE | 5YK 0.9/3.0 | RG 402 | — | | | |
| 50 | 6.4 | 5.38max/PTFE | 5YK 1.63/5.33 | RG 401 | _ | | | |
| 75 | 2.67 | 1.68max/PTFE | 5YC6Y 0.3/1.6 | RG 179 | 75-2-1 | | | |
| 75 | 3.0 | 1.60max/PTFE | _ | RD 179 | — | | | |
| 75 | 3.3 | 1.68max/Cell-FEP | 06YCC(St)6Y 0.4/1.6 | | — | | | |
| 75 | 3.2 | 2.1max | _ | ST 212 | _ | | | |
| 75 | 3.6 | 2.0max/Cell-PE | 02Y(St)CY 0.45/2.0 | — | — | | | |
| 75 | 4.0 | 2.0maxE/Cell-PE | 02Y12YC(mS)C6Y 0.45/2.0 | — | _ | | | |
| 75 | 4.0 | 2.54max/PE | 2YCY 0.4/2.5 | _ | _ | | | |
| 75 | 4.8 | 2.54max/PE | 2YCCY 0.4/2.5 | _ | — | | | |
| 75 | 5.0 | 2.54max/PE | 2YC(mS)CY 0.4/2.5 | — | _ | | | |
| 75 | 6.1 | 4.25max/PE | 2YCY 0.7/4.4 | _ | _ | | | |
| 75 | 6.2 | 2.83max/PE | 2YC(mS)CY 0.5/3.0 | _ | _ | | | |
| 75 | 6.25 | 3.8max/PE | 2YCY 0.58/3.7 | RG 59 | _ | | | |
| 75 | 7.8 | 4.43max/PE | 2YCCY 0.7/4.4 | _ | _ | | | |
| 75 | 9.8 | 6.4/PE | 2YCCY 1.0/6.5 | _ | _ | | | |
| 75 | 9.8 | 6.4/PE | 2YC(mS)CY 1.0/6.5 | _ | _ | | | |

1) Material label

PTFE Polytetrafluorethylene

ΡE Polyethylene

FEP Perfluorethylene propylene

PFA Perfluoralkoxy copolymer Mounting label of the VDE type numbers (from inside to outside) 2) Example:

Explanation

| Dielectric and Jacket 2Y = PE 5Y = PTFE 02Y = Cell PE 06Y = Cell FEP 6Y = FEP | E C = Cu braiding TFE K = Cu tape Cell PE Intermediate layer: Cell FEP mS = magnetic scre | | | Specifications on inner conductor: vs = silver plated staku = Bare copper-clad steel wire conductor | | | Jacket color: gn = green gr = grey rt = red ws = white | | | |
|--|--|--------|---|--|---|---|--|-----|----------|-------|
| | | 6Y | С | (mS) | С | Y | 0.7/4.0 | -75 | (r2/100) | vs gr |
| Dielectric | | | | | | | | | | |
| 1st screen | | | | | | | | | | |
| Intermediate layer | | | | | | | | | | |
| 2nd screen | | | | | | | | | | |
| Outer jacket | | | | | | | | | | |
| Diameter inner conductor/ | | | | | | | | | | |
| Characteristic impedance | | | | | | | | | | |
| Max. reflection (r) in % / fr | equency in MHz | | | | | | | | | |
| Specifications on inner co | nductor and/or jacket c | olor — | | | | | | | | |

www.tycoelectronics.com

Dimensions are in millimeters and inches unless otherwise specified. Values in brackets are standard equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803 South America: 55-11-2103-6000 Hong Kong: 852-2735-1628 Japan: 81-44-844-8013 UK: 44-8706-080-208