



OCTOBYTE

FAST AND RUGGED 4/8 POLE INTERCONNECT SYSTEM FOR ETHERNET DATA APPLICATIONS

OCTOBER 2013



The Faster 4/8 Pole Interconnect System for Ethernet Data Applications

Glenair series ITH connector with Octobyte™ contacts is available with fully dedicated ETHERNET protocol or in a combo version where a mix of signal-power and Ethernet is required. RoHS compliant, IP67 (IP68 on request) exceeds performance expectations typical in harsh environmental applications found throughout rail and industrial markets. OCTOBYTE™ contacts are vibration resistant and designed to work with ETHERNET cables from CAT 5 to CAT 7A, MVB-WTB, RG58 Coax.

ITH connectors with OCTOBYTE™ contacts are easy and fast to assemble, making them the best solution for harsh environmental applications where signal reliability is a must:

- **Commuter rail**
- **Passenger information systems** (audio/video/digital displays)
- **Monitoring and control** (braking/doors/lighting/data)
- **Heavy industry**
- **Data control**
- **Safety systems**

Tested in accordance with:

ISO F0 STP: CAT 7A

EN50173-1 F600-STP: CAT 7

EN50173-1 D STP: CAT 5E

Tested for compliance according to EN50173-1 standards set for CAT5E and CAT7. Testing was conducted using 12 jumpers, each 7.5 meters in length for a total of 90 meters.



Adam E. Moreira

Commuter Train Applications



Masakazu Matsumoto

Passenger Information Systems

Number of Contacts
8 = 8 Poles

Cable Range
(See Table I)

Alternative Colour
(See Table II)

Q

0

8

P

X

B1

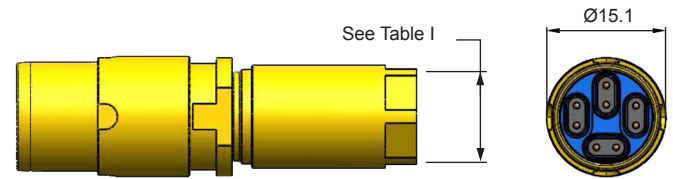
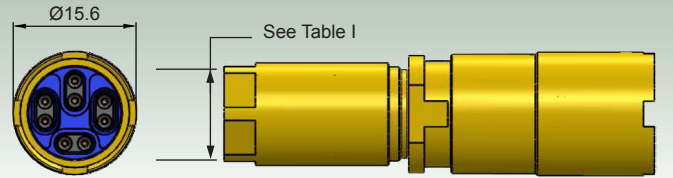
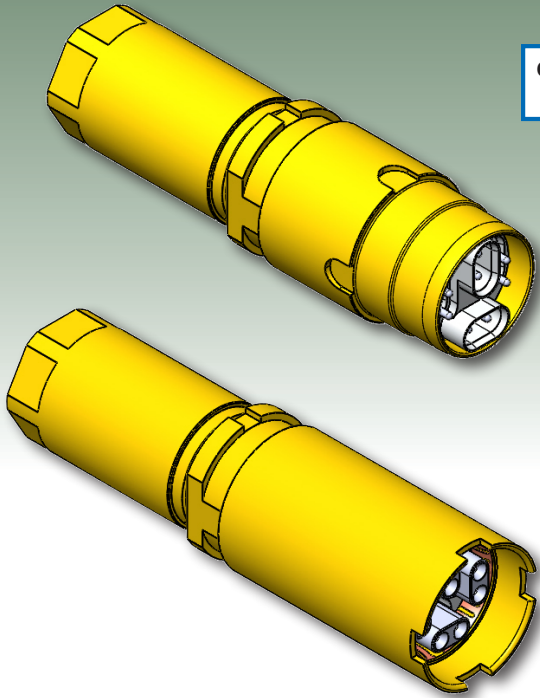
XXX

7A

Contact Size

Contact Gender
P = Male
S = Female

Gold Plating



ETHERNET CAT 7A contacts

Data Transmission Ethernet Contacts for:

- » ETHERNET CAT 6A
- » ETHERNET CAT 7
- » ETHERNET CAT 7A

Featuring:

- » Internal crimpable contacts
- » Inspectable contact
- » Integrated cable clamp
- » Low mating force

Technical Characteristics:

- » Current rating: 5A max
- » Voltage drop (at 5A and 25°C): 70mV max

Materials and Finish:

- » Copper alloy and gold plating

Inserts:

- » Thermoplastic resin

Contact Bucket Detail

Wire Size : AWG 22 - AWG 28

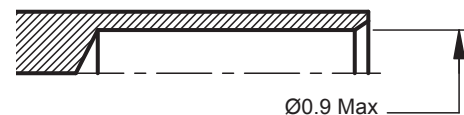
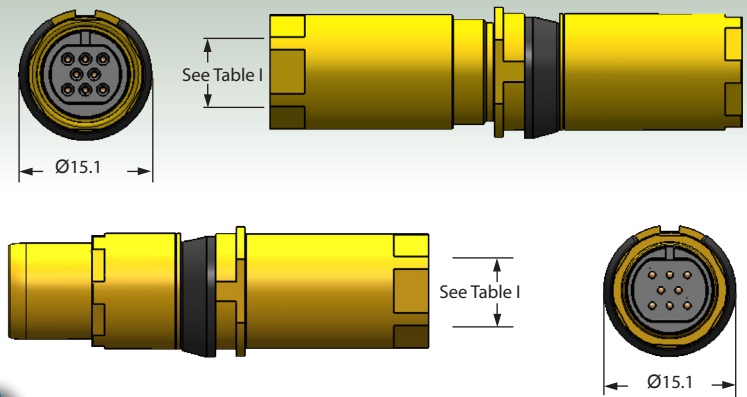
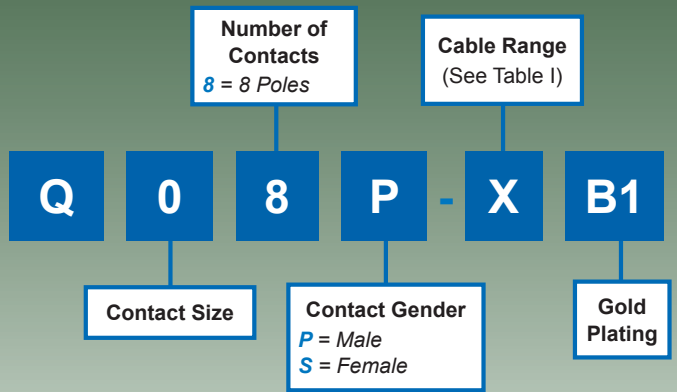
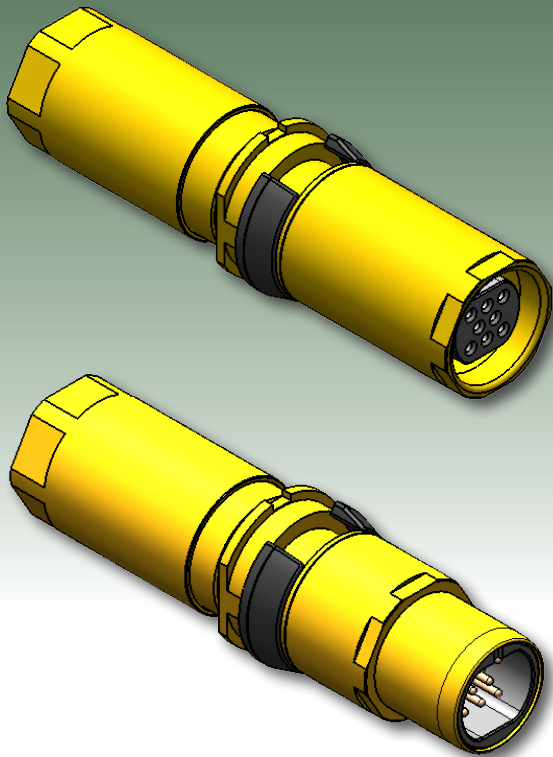


Table I

Wire Size Type	Cable O.D. Range
A	6-7
B	7-8
C	8-9

Table II

Colour Code	Colour
Omitted For Standard	
G14	Black
G14GN	Green
G14GY	Grey
G14R	Red
G14Y	Yellow



ETHERNET CAT 5 CONTACTS

Data Transmission Contacts for:

- » • ETHERNET CAT 5
- » • ETHERNET CAT 5E
- » • ETHERNET CAT 6
- » • ETHERNET CAT 6A

Featuring:

- » - Internal crimpable contacts
- » - Inspectable contact
- » - Integrated cable clamp
- » - Low mating force

Technical Characteristics:

- » - Current rating: 5A max
- » - Voltage drop (at 5A and 25°C): 70mV max

Materials and Finish:

- » - Copper alloy and gold plating

Inserts:

- » - Thermoplastic resin
UL94V0-NFF16-102 12F3 Exigence 3

Contact Bucket Detail

Wire Size: AWG 22 - AWG 28

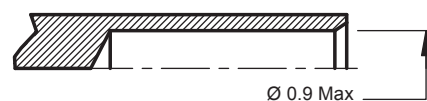
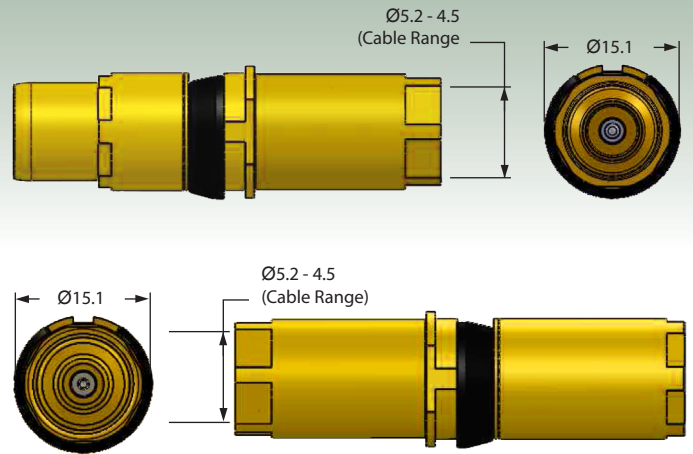
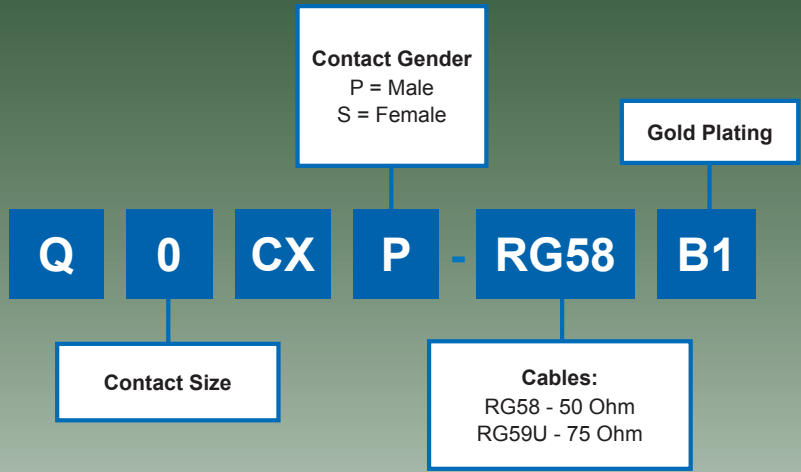
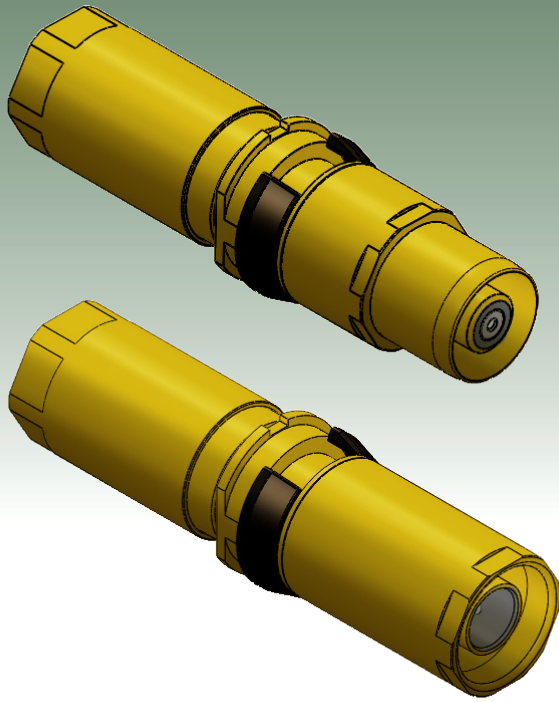


Table 1	
Wire Size Type	Cable O.D. Range
A	6 - 7
B	7 - 8
C	8 - 9



COAX CONTACTS

Data Transmission Contacts for:

» RG58

Featuring:

- » Internal solder contacts
- » Inspectable contact
- » Integrated cable clamp
- » Low mating force

Technical Characteristics:

- » Current rating: 5A max
- » Voltage drop (at 5A and 25°C): 70mV max

Materials and Finish:

- » Copper alloy and gold plating

Inserts:

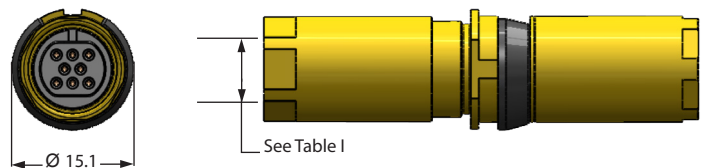
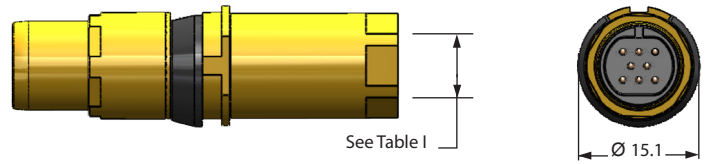
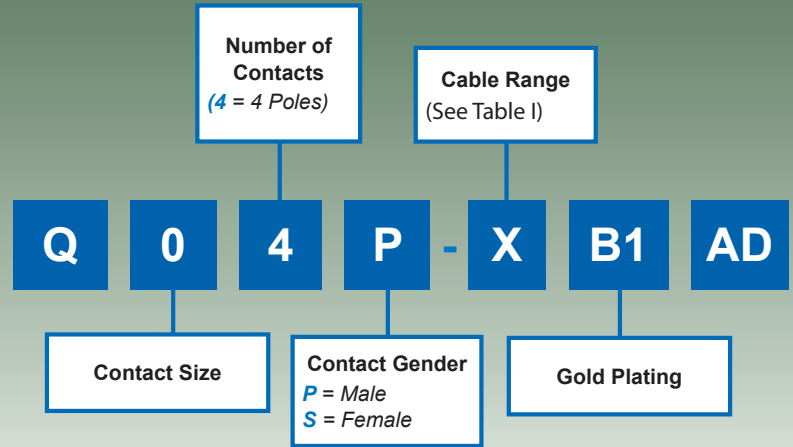
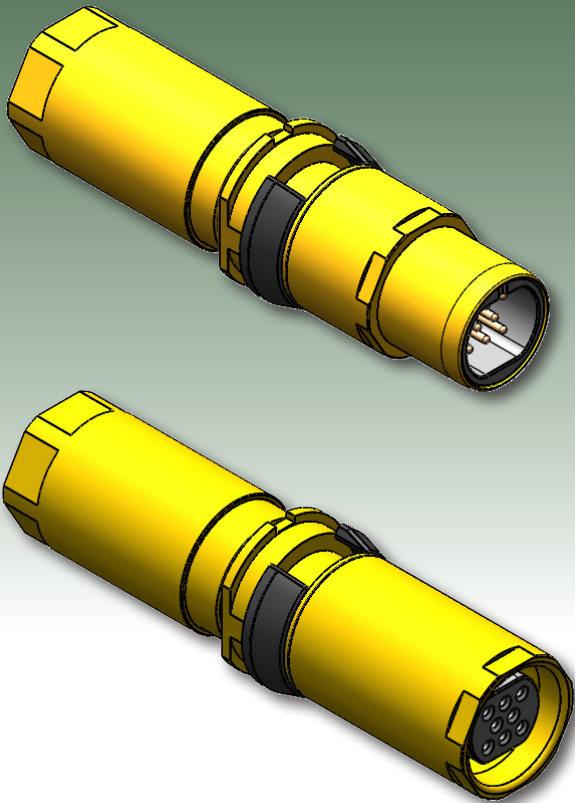
- » P.T.F.E.

Crimp the ferrule on the braid using the following tools:

Crimping tool:	M22520 / 5-01
Die Assy for RG58:	M22520 / 5-05A
Die asy for RG59	M22520 / 5-45 B
Die asy for RG142	M22520 / 5-45 A
Die asy for RG174	M22520 / 5-08 A
Die asy for RG179	M22520 / 5-08 A
Die asy for RG223	M22520 / 5-45 A

For COAX assembly instructions visit:

http://www.glenair.com/interconnects/committal/its/pdf/contacts_and_tools_cc_700xx.pdf



CONTACT BUCKET DETAIL

WIRE SIZE : AWG 18 - AWG 22



Table I	
Wire Size Type	Cable O.D. Range
A	6 - 7
B	7 - 8
C	8 - 9

ETHERNET MVB - WBT contacts

Data Transmission Contacts for:

- » MVB - Multifunctional Vehicle Bus
- » WTB - Wired Train Bus

Featuring:

- » Internal crimpable contacts
- » Inspectable contact
- » Integrated cable clamp
- » Low mating force

Technical Characteristics:

- » Current rating: 5A max
- » Voltage drop (at 5A and 25°C): 70mV max

Materials and Finish:

- » Copper alloy and gold plating

Inserts:

- » Thermoplastic resin
UL94V0-NFF16-12 12F3 Exigence 3

Insertion, Extraction and Crimping Tools

Manual Crimping Tool
809-136



Manual Crimping Tool
M.105015



Positioner
809-005



Extraction Tool
M.104010



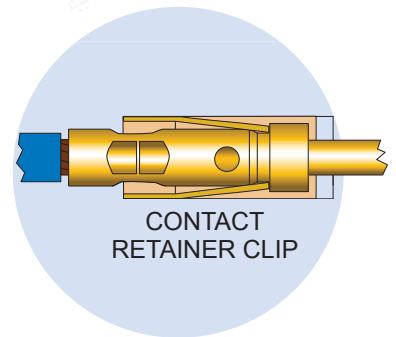
Turret
809-138

Insertion / Extraction Tool
809-088



EXTRACTION TIP
WHITE END

INSERTION TIP
BLUE END



CONTACT
RETAINER CLIP



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Out of This World
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