

# Ethernet Buccaneer Environmentally Sealed Connectors

## IMPORTANT - PLEASE READ INSTRUCTIONS PRIOR TO ASSEMBLY

Before using the connector, it is important that these instructions are carefully read and understood to ensure the connector system is completely water tight and performs to specification.

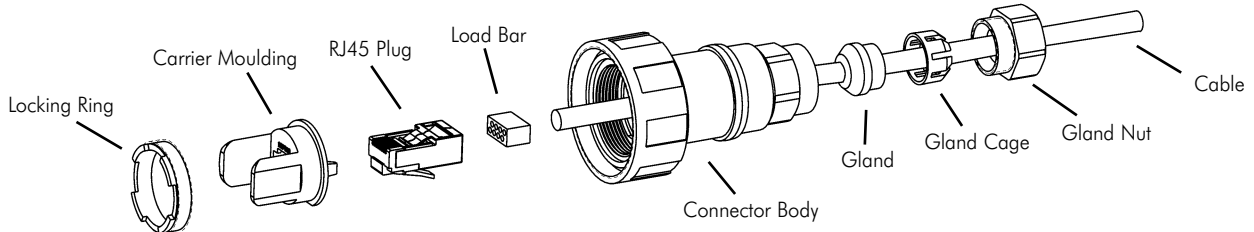
### Cable Glands

To ensure the correct cable sealing, cable glands are supplied to accurately fit cable diameters from 3.5 to 8.0mm. It is important to choose the closest gland size to the cable being used.

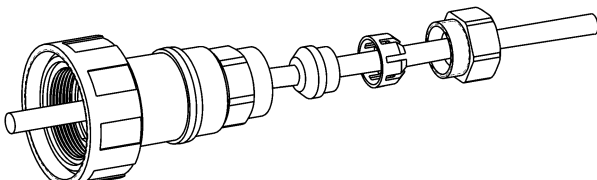
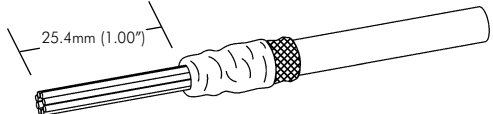
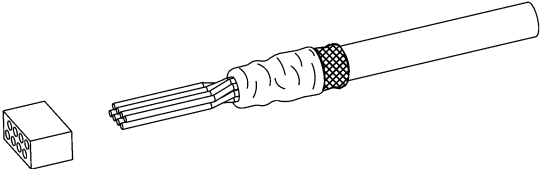
Cable diameter	Gland Colour
3.5 - 5mm	Blue
5 - 7mm	Green
6 - 8mm	Red

The standard shielded RJ45, as supplied, is suitable for cables up to 6.0mm diameter, larger cables may require different assembly techniques.

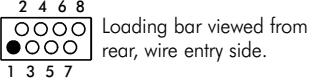
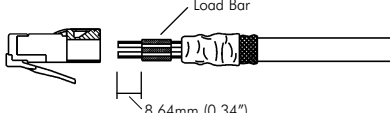
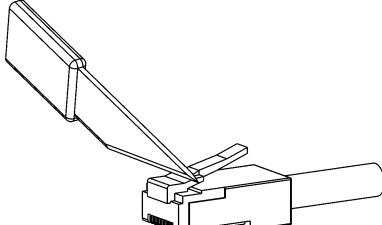
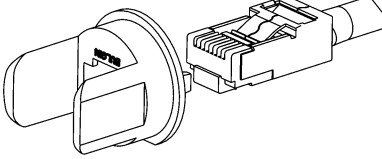
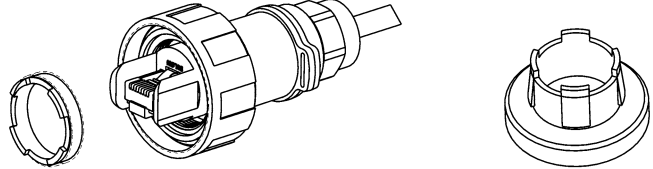
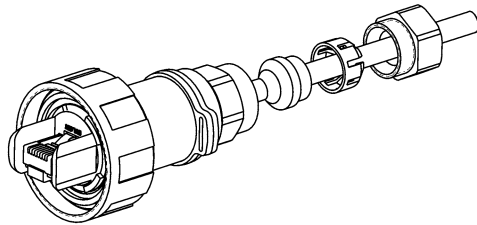
## CONNECTOR COMPONENTS



## ASSEMBLY/WIRING INSTRUCTIONS

- Thread the gland nut, gland cage, gland and connector body on to the cable.
 
- Remove the cable jacket carefully taking care not to damage the braid and foil. Fold back the braid and foil over the cable jacket.
 
- Un-twist the conductors and feed through the appropriate hole in the load bar, according to the wiring standard required. Push the loading bar fully home on to cable. Trim conductors to extend 8.64mm (0.34") out of the front of the load bar.
 

568-A	Position	568-B
White/Green	1	White/Orange
Green	2	Orange
White/Orange	3	White/Green
Blue	4	Blue
White/Blue	5	White/Blue
Orange	6	Green
White/Brown	7	White/Brown
Brown	8	Brown


- Push load bar and cable fully home into RJ45, ensuring the braid and foil are in contact with the metal shell. Crimp RJ45 with appropriate crimp tool and die set. Trim back braid and foil flush with rear of RJ45 body.
 
- Crimp the latching clip on the RJ45 ensuring this is completely removed.
 
- Push the RJ45 into the carrier moulding until it latches.
 
- Pull up the connector body and locate the carrier. The carrier sits into a 'D' shape aperture in the connector body, ensure it is seated correctly. Locate locking ring and tighten ring to retain insert, using the assembly tool provided.
 
- Slide gland, gland cage and gland nut up to body moulding then tighten to torque of 1.5-2.0lb/ins, 13-18Nm. For the PX0834/A version fully tighten nut until end of travel. Note: Over tightening of gland nut may constrict cable and could cause signal distortion.
 

# Ethernet Buccaneer Environmentally Sealed Connectors

## TECHNICAL SPECIFICATION FOR ETHERNET BUCCANEER CONNECTOR SYSTEM

### Stranded S-FTP Patch cord cable - PUR Jacket

Construction	Polyurethane (PUR) Jacket
Conductors	24AWG (7/0.2mm) bare copper
Insulation	HD-PE
Pair	2 of the above cores twisted
Core	4 of the above cores
Tape	1 lap mylar tape
Screen	1 layer mylar and aluminium tape, tape, 0.12mm tinned copper braid
Sheath	PUR Jacket Black
Op Temperature	-25°C to +85°C
Min. bend radius	10 x o/d (installation)
Min. bend radius	6 x o/d (installed)
Diameter	6.1mm nominal

### Electrical @ 20°C

Characteristic Impedance	100Ω ±15Ω @ 100MHz
Capacitance	330pF/km
Conductor Loop resistance	29Ω/100m maximum
Skew	45 nsec/100m @ 100MHz
TIA/EIA Rating	Cat 5e

# Ethernet Buccaneer

IP68 Sealed Ethernet Connectors

**Wiring and Assembly Instructions for  
PX0834/A and PX0834/B**

### Re-wireable and Panel mounted connectors

<b>Mechanical</b>	
Sealing	IP68, EN60529
<b>Materials</b>	
Connector Body	Polyester
Flammability rating	UL94V-0
'O' rings	Silicon
Panel Gasket	Silicon
Operating Temperature	-20°C to +70°C
RoHS	Compliant

### RJ45 Plug

<b>Materials</b>	
Moulding	Polycarbonate
Flammability	UL94V-0
Contact material	Phosphor Bronze
Contact plating	50 micron gold
Operating Temperature	-40°C to +70°C
Mating cycles	1,000 cycles
<b>Electrical</b>	
No. Conductors	8
Current rating	1.5A
Voltage rating	30V ac, 42V dc
Contact resistance	10mΩ max.
Performance	Cat 5e
RoHS	Compliant

### RJ45 Coupler

<b>Materials</b>	
Coupler Shell	Copper Alloy
Coupler Plating	Nickel
Moulding	ABS
Flammability	UL94V-0
Contact material	Phosphor Bronze
Contact plating	50 micron gold
Operating Temperature	-40°C to +70°C
Mating cycles	1,000 cycles
<b>Electrical</b>	
No. Conductors	8
Current rating	1.5A
Voltage rating	30V ac, 42V dc
Contact resistance	10mΩ max.
Performance	Cat 5e
RoHS	Compliant