



- IP68 when mated, Tested in accordance with EN60529:1992+A2:2013 0
- IP69K when mated, Tested in accordance with DIN 40050/Part 9 IP69k 0
- 0 EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1
- 0 Secure, proven & reliable screw locking mechanism
- PUR / PVC Jacket on cable 0
- Chemical resistance & flame retardant 0
- 0 Cat 8 toolless Keystone IDC connector
- Data rates up to 25Gbps

- Backwards compatibility throughout
- 0 Cat 5e or Cat 6a Shielded coupler
- Rewireable Flex connector up to Cat 6a 0
- 0 Field termination up to Cat 6a
- 0 Earth lead version of panel mounting coupler
- 0 Cat 5e PCB Mount & IDC termination panel connector
- 0 High noise immunity, full shielding and EMI protection
- Power over Ethernet (PoE) compliant



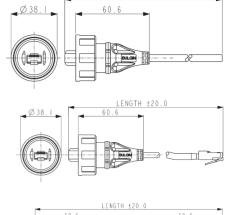
LENGTH ±20.0

Patch Cord Flex Connector



- Mates with all panel mounting connectors
- Patchcords with IP68 connector
- Supplied with shielded RJ45 plug
- Single or double end terminated Standard lengths: 2m, 3m & 5m
- S-FTP cable construction
- PUR (Cat 5e) or PVC (Cat 6a / 8) jacket cable
- Wiring configuration to 568-B

PX0836



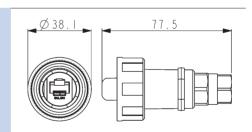
| Part no.    | Туре         | Length | Description                                       |
|-------------|--------------|--------|---|
| PX0836/2M00 | Wire end     | 2m     | Cat 5e IP68 RJ45 Buccaneer to bare end            |
| PX0836/3M00 | Wire end     | 3m     | Cat 5e IP68 RJ45 Buccaneer to bare end            |
| PX0836/5M00 | Wire end     | 5m     | Cat 5e IP68 RJ45 Buccaneer to bare end            |
| PX0837/2M00 | Single ended | 2m     | Cat 5e IP68 RJ45 Buccaneer to Shielded RJ45       |
| PX0837/3M00 | Single ended | 3m     | Cat 5e IP68 RJ45 Buccaneer to Shielded RJ45       |
| PX0837/5M00 | Single ended | 5m     | Cat 5e IP68 RJ45 Buccaneer to Shielded RJ45       |
| PX0838/2M00 | Double ended | 2m     | Cat 5e IP68 RJ45 Buccaneer to IP68 RJ45 Buccaneer |
| PX0838/3M00 | Double ended | 3m     | Cat 5e IP68 RJ45 Buccaneer to IP68 RJ45 Buccaneer |
| PX0838/5M00 | Double ended | 5m     | Cat 5e IP68 RJ45 Buccaneer to IP68 RJ45 Buccaneer |
| PX0896/2M00 | Wire end     | 2m     | Cat 6a IP68 RJ45 Buccaneer to bare end            |
| PX0896/3M00 | Wire end     | 3m     | Cat 6a IP68 RJ45 Buccaneer to bare end            |
| PX0896/5M00 | Wire end     | 5m     | Cat 6a IP68 RJ45 Buccaneer to bare end            |
| PX0897/2M00 | Single ended | 2m     | Cat 6a IP68 RJ45 Buccaneer to Shielded RJ45       |
| PX0897/3M00 | Single ended | 3m     | Cat 6a IP68 RJ45 Buccaneer to Shielded RJ45       |
| PX0897/5M00 | Single ended | 5m     | Cat 6a IP68 RJ45 Buccaneer to Shielded RJ45       |
| PX0898/2M00 | Double ended | 2m     | Cat 6a IP68 RJ45 Buccaneer to IP68 RJ45 Buccaneer |
| PX0898/3M00 | Double ended | 3m     | Cat 6a IP68 RJ45 Buccaneer to IP68 RJ45 Buccaneer |
| PX0898/5M00 | Double ended | 5m     | Cat 6a IP68 RJ45 Buccaneer to IP68 RJ45 Buccaneer |
| PX0857/2M00 | Single ended | 2m     | Cat 8 IP68 RJ45 Buccaneer to IP68 Shielded RJ45   |
| PX0857/3M00 | Single ended | 3m     | Cat 8 IP68 RJ45 Buccaneer to IP68 Shielded RJ45   |
| PX0857/5M00 | Single ended | 5m     | Cat 8 IP68 RJ45 Buccaneer to IP68 Shielded RJ45   |
| PX0858/2M00 | Double ended | 2m     | Cat 8 IP68 RJ45 Buccaneer to IP68 RJ45 Buccaneer  |
| PX0858/3M00 | Double ended | 3m     | Cat 8 IP68 RJ45 Buccaneer to IP68 RJ45 Buccaneer  |
| PX0858/5M00 | Double ended | 5m     | Cat 8 IP68 RJ45 Buccaneer to IP68 RJ45 Buccaneer  |
|             |              |        |   |

Re Wireable Flex Connector



PX0834

- Mates with all panel mounting connectors
- Supplied with shielded RJ45 plug
- Two versions:
- Cat 5e or Cat 6a Cable size from 5 to 6mm diameter, or extra cable glands for other cable sizes from 3.5 to 8mm diameter.



#### Part no. **Description**

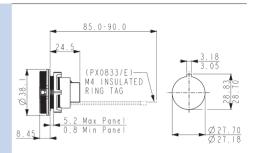
| PX0834/A | Cat 5e suitable for use with cables from 5 to 6mm diameter                              |
|----------|---|
| PX0834/B | Cat 5e with 2 extra cable glands, suitable for use with cables from 3.5 to 8mm diameter |
| PX0894/A | Cat 6a suitable for use with cables from 5 to 6mm diameter                              |
| PX0894/B | Cat 6a with 2 extra cable glands, suitable for use with cables from 3.5 to 8mm diameter |
|          |   |



Front Panel Mounting Coupler Connector



- Cat 5e mates with PX0836, PX0837, PX0838 & PX0834 flex connectors
- Cat 6a mates with PX0896, PX0897, PX0898 & PX0894 flex connectors
- Standard RJ45 patchcord can be plugged into rear
- Version with earth wire available
- Single hole fixing
- Complete with panel sealing gasket



PX0833

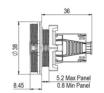
| Part no. | Description                 | Fixing              |  |
|----------|-----------------------------|---------------------|--|
|          |                             |                     |  |
| PX0833   | Cat 5e coupler              | Front panel mounted |  |
| PX0833/E | Cat 5e coupler + earth wire | Front panel mounted |  |
| PX0893   | Cat 6a coupler              | Front panel mounted |  |
| PX0893/E | Cat 6a coupler + earth wire | Front panel mounted |  |

Front Panel Mounting Keystone Connector



PX0855/KS

- Backwards compatible with all flex connectors
- Cat 8 mates with PX0857, PX0858 flex connectors
- Toolless jack termination
- Maintains shielding ground continuity
- Single hole fixing
- Complete with panel sealing gasket





Part no. **Description Fixing** 

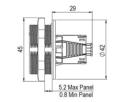
PX0855/KS Cat 8 Keystone connector Front panel mounted

Rear Panel Mounting Keystone Connector



PX0856/KS

- Backwards compatible with all flex connectors
- Cat 8 mates with PX0857, PX0858 flex connectors
- Toolless jack termination
- Maintains shielding ground continuity
- Single hole fixing
- Complete with panel sealing gasket





| Part no. Description | Fixing |
|----------------------|--------|
|----------------------|--------|

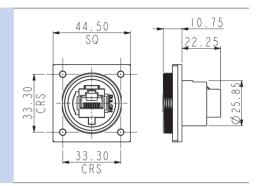
PX0856/KS Cat 8 Keystone connector Rear panel mounted



Flange Mounting Connector



- Cat 5e mates with PX0836, PX0837, PX0838 & PX0834 flex connectors
- Cat 6a mates with PX0896, PX0897, PX0898 & PX0894 flex connectors
- Standard RJ45 patchcord can be plugged into rear
- Version with earth wire available



| Part no. | Description    | Fixing          |
|----------|----------------|-----------------|
| PX0870   | Cat 5e coupler | Flange mounting |

PX0870 Cat 5e coupler PX0870/E Cat 5e coupler + earth wire PX0890 Cat 6a coupler

Flange mounting Flange mounting PX0890/E Cat 6a coupler + earth wire Flange mounting

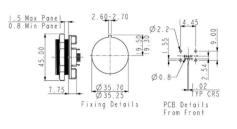
PX0870

PCB Mounting Connector



PX0839/PC

- Cat 5e shielded RJ45 interface
- Rear of panel mounted
- Mates with PX0836, PX0837,PX0838 and PX0834 flex connectors
- For direct vertical mounting to PCB, straight Plugs
- Complete with panel sealing PX0839/PC gasket



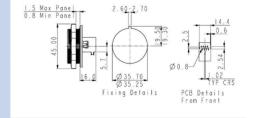
#### **Description** Part no. **Fixing**

PX0839/PC Cat 5e connector - PC Rear panel mounted

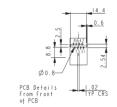
PCB Mounting Connector



- PX0839/90
- Cat 5e shielded RJ45 interface
- Rear of panel mounted
- Mates with PX0836, PX0837,PX0838 and PX0834 flex connectors
- For direct horizontal mounting to PCB, 90° Plugs
- Complete with panel sealig PX0839/90 gasket



| Part no.  | Description                        | Fixing             |
|-----------|------------------------------------|--------------------|
| PX0839/90 | Cat 5e connector - 90 degree Plugs | Rear panel mounted |



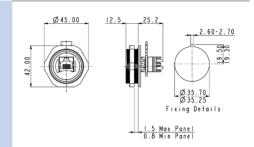


Panel Mounting Connector



PX0839/IDC

- Cat 5e shielded RJ45 interface
- Rear of panel mounted
- Mates with PX0836, PX0837,PX0838 and PX0834 flex connectors
- Two IDC blocks for discrete termination
- Complete with panel sealing



| Part no. | Description | Fixing |  |
|----------|-------------|--------|--|
|          |             |        |  |

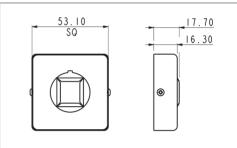
PX0839/IDC Cat 5e coupler - IDC Rear panel mounted

Shield Back Shell Accessory



PX0888

- Maintains RJ45 coupler screening directly to panel
- Shielding can is fixed to rear of panel mount connector
- For use on PX0833, PX0893 & PX0855



#### Part no. **Description**

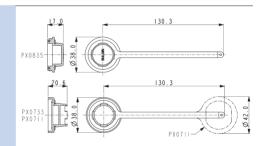
PX0888 Shielding backshell accessory

Accessories



Sealing Caps

- Sealing caps to maintain IP68 rating when connectors are not in use
- Replacement shielded RJ45s
- Hand crimp tool for shielded RJ45
- Patch cord cable available in 50m reels



| Part no. | Description  |
|----------|--|
| PX0835   | Sealing Cap for use on all ethernet flex connectors        |
| PX0733   | Sealing Cap for use on all front panel mounting connectors |
| PX0711   | Sealing Cap for use on all rear panel mounting connectors  |
| 14151    | Cat 5e & Cat 6a Hand crimp tooling + die set               |
| 14199    | Cat 5e PUR Jacket Cable - 50m reel                         |
| 14150    | Cat 5e Replacement shielded RJ45                           |
| 15241    | Cat 6a PVC Jacket Cable - 50m reel                         |



| Connectors   | Cat 5e & 6a   | Cat 8  |  |
|--|---|--|--|
| Sealing:   | IP68, EN60529:1992+A2:2013 (10m depth for 2 weeks)              | IP68, EN60529:1992+A2:2013<br>(10m depth for 2 weeks)              |  |
|  | IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k        | IP69K, Tested in accordance with DIN 40050/Part 9 IP6k9k           |  |
| Operating Temperature:   | -20°C to +70°C  | −20°C to +60°C   |  |
| Materials - Overmoulded<br>Overmould material:<br>Flammability rating: | PVC (black)<br>UL94V-0  | Polyamide (black)<br>UL94V-0                                       |  |
| Salt Mist:   | EN60068-2-52 Test Kb Salt Mist (Cyclic) Marine Severity Level 1 | EN60068-2-52 Test Kb Salt Mist<br>(Cyclic) Marine Severity Level 1 |  |

## **Materials - Re-wireable and Panel Connectors**

Connector body & locking ring Polyester Panel connector Nylon 6 Flammability rating UL94V-0 Silicone 'O' rings Panel Gasket - round Silicone Panel Gasket - flange
RoHS Neoprene Compliant

| Cables & POE  | Cat 5e  | Cat 6a  | Cat 8  |
|---|---|---|--|
| Conductors Insulation Pair Core Screen Braid Jacket Op Temperature Diameter Flame Test Electrical @ 20°C  | 24AWG (7/0.2mm) bare copper<br>HD-PE<br>2 of the above cores twisted<br>4 of the above cores<br>1 layer mylar and aluminium tape,<br>0.12mm tinned copper braid<br>PUR (Black)<br>-25°C to +85°C<br>6.1mm nominal | 26AWG (7/0.16mm) bare copper<br>PE (Skin - Foam - Skin)<br>2 of the above cores twisted<br>4 of the above cores<br>Aluminium & Polyester<br>Tinned Copper Braid<br>PVC (Black)<br>-25°C to +75°C<br>6.0 mm nominal<br>FT4 | 26AWG (7/0.16mm) bare copper N/A 2 of the above cores twisted 4 of the above cores Aluminium & Polyester Tinned Copper Braid PVC (Black) -20°C to +60°C 6.0 mm nominal |
| Characteristic: Impedance Capacitance Conductor Loop Resistance Skew PoE Standard:  | 100 $\Omega$ ±15 $\Omega$ @ 100MHz 330pF/km 29/ $\Omega$ 100m maximum 45 nsec/100m @ 100MHz IEEE 802.3af (2 pair)   | 26Ω /km<br>IEEE 802.3bt, Type 4 (4 pair)<br>4PoE++  | IEEE 802.3bt, Type 4 (4 pair)<br>4PoE++  |
| Power rating Current rating Voltage rating (DC) Mechanical Characteristics Minimum Tensile Strength of Jacket (kgf/mm²) Maximum Length for Strip of Jacket (mm) | 12.95W<br>350mA<br>44-57V   | 71W<br>960mA<br>41.1V-57V<br>1.05   | 71W<br>1500mA<br>72V   |



## Cable construction - CAT 5e



### Polyurethane (PUR) Jacket

## Cable construction - Cat 6a & Cat 8



Polyvinyl Chloride (PVC) Jacket

| RJ45 Plug             | Cat 5e & PoE       | Cat 6a             | Cat 8                |
|-----------------------|--------------------|--------------------|----------------------|
| Materials             |                    |                    |                      |
| Moulding              | Polycarbonate      | Polycarbonate      | Polycarbonate        |
| Shielding             |                    |                    | Zinc Alloy           |
| Flammability          | UL94V-0            | UL94V-0            | UL94V-2              |
| Contact material      | Phosphor Bronze    | Phosphor Bronze    | Phosphor Bronze      |
| Contact plating       | 50-micron gold     | 50-micron gold     | 50-micron gold       |
| Operating Temperature | –40°C to +70°C     | -40°C to +70°C     | –20°C to +60°C       |
| Mating cycles         | 1,000 cycles       | 1,000 cycles       | 1,200 cycles         |
| RoHS                  | Compliant          | Compliant          | Compliant            |
| Electrical            |                    |                    |                      |
| No. Conductors        | 8                  | 8                  | 8                    |
| Conductor types       | 24-28AWG, solid or | 24-28AWG, solid or | 26AWG, multistranded |
| 71                    | multistranded      | multistranded      | (pre-terminated)     |
| Current rating        | 350mA              | 1500mA             | 1500mA               |
| Voltage rating        | 37V AC, 57V DC     | 30V AC, 42V DC     | 72V DC               |
| Contact resistance    | 10mΩ               | 10mΩ               | $20m\Omega$ max.     |

## Cat 8 (Keystone)

| M | at | eı | ria | Is |
|---|----|----|-----|----|
|   |    |    |     |    |

Coupler Shell Coupler Plating Zinc Nickel PC Moulding PC IDC Housing

PC + glass fibre IDC Cap

Tin plated Phosphor Bronze IDC Terminal Stainless steel, Copper foil **Ground Contact** 

Nylon 6/6 Tie wrap UL94V-2 Flammability Phosphor Bronze Contact material 50-micron gold Contact plating Operating Temperature -10°C to +60°C >750 cycles Mating cycles - Jack >20 terminations Mating cycles - IDC RoHS Compliant

### **Electrical**

No. Conductors 8 1.5A Current rating 100V DC Voltage rating

1000V DC/AC @ 60hz for 1 minute Dielectric Withstand

 $10m\Omega$  max. Contact resistance



| RИ | 0+0 | rio | ١۵. |
|----|-----|-----|-----|

**RJ45 Coupler** 

**Materials** Coupler Shell Coupler Plating Moulding Flammability Contact material Contact plating Operating Temperature Mating cycles
RoHS

**Electrical** No. Conductors Current rating

Voltage rating Contact resistance Cat 5e Cat 6a

Nickel PBT UL94V-0 Phosphor Bronze 50 micron gold -40°C to +70°C 1,000 cycles Compliant

Copper Alloy

1.5A 30V AC, 42V DC  $10m\Omega$  max.

Cat 5e

Copper Alloy Nickel PBT UL94V-0 Phosphor Bronze 50 micron gold 0°C to +70°C 1,000 cycles Compliant

1.5A 30V AC, 42V DC  $10m\Omega$  max.

## **RJ45 PCB Connector**

#### **Materials**

Coupler Shell Coupler Plating Moulding Flammability Contact material Contact plating PC Plugs Operating Temperature Mating cycles
RoHS

**Electrical** No. Conductors Current rating

Voltage rating Contact resistance Copper Alloy Nickel UL94V-0 Phosphor Bronze 50 micron gold Tin plated -40°C to +70°C 1,000 cycles Compliant

1.5A 30V AC, 42V DC  $10m\Omega$  max.

8

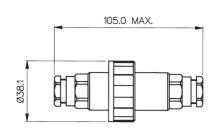
PX0777

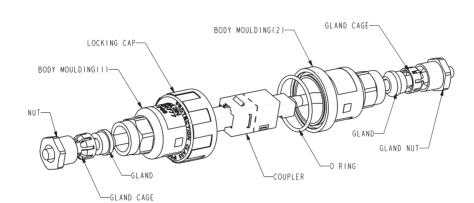


Cable Joiner



- IP68 Rating For Sealed Inline RJ45 Connections
- Supplied Complete with Coupler
- Shielded (STP) & Unshielded (UTP) versions
- Cat5e Shielded Coupler also available
- Cable Range 3.5 8mm (with glands supplied)





| Specifications   | PX0777/UTP  | PX0777/STP  | PX0777/CAT5ESTP   | PX0777/CAT6ASTP   |
|--|---|---|---|---|
| Rating:<br>No. of Conductors:<br>Coupler Type:<br>Cable Range: | 1.5A, 30V AC, 42V DC<br>8<br>Unshielded<br>3.5 - 8mm<br>With glands supplied:<br>3.5 - 5mm (Blue)<br>5 - 7mm (Green)<br>6 - 8mm (Red) | 1.5A, 30V AC, 42V DC<br>8<br>Shielded<br>3.5 - 8mm<br>With glands supplied:<br>3.5 - 5mm (Blue)<br>5 - 7mm (Green)<br>6 - 8mm (Red) | 1.5A, 30V AC, 42V DC<br>8<br>Shielded CAT5e performance<br>3.5 - 8mm<br>With glands supplied:<br>3.5 - 5mm (Blue)<br>5 - 7mm (Green)<br>6 - 8mm (Red) | 1.5A, 30V AC, 42V DC<br>8<br>Shielded CAT6a performance<br>3.5 - 8mm<br>With glands supplied:<br>3.5 - 5mm (Blue)<br>5 - 7mm (Green)<br>6 - 8mm (Red) |
| Material:  | Glass Filled Polyamide  | Glass Filled Polyamide  | Glass Filled Polyamide  | Glass Filled Polyamide  |
|  | UL94V-0   | UL94V0  | UL94V0  | UL94V0  |
| Sealing:   | IP68 to BSEN  | IP68 to BSEN  | IP68 to BSEN  | IP68 to BSEN  |
|  | 60529:1992+A2:2013  | 60529:1992+A2:2013  | 60529:1992+A2:2013  | 60529:1992+A2:2013  |
|  | (10m depth for 2 weeks)   | (10m depth for 2 weeks)   | (10m depth for 2 weeks)   | (10m depth for 2 weeks)   |
| Salt Mist  | EN60068-2-52 Test Kb Salt Mist  | EN60068-2-52 Test Kb Salt Mist  | EN60068-2-52 Test Kb Salt Mist  | EN60068-2-52 Test Kb Salt Mist  |
|  | (Cyclic)  | (Cyclic)  | (Cyclic)  | (Cyclic)  |
|  | Marine Severity Level 1   | Marine Severity Level 1   | Marine Severity Level 1   | Marine Severity Level 1   |
| Operating Temp<br>Range:                                       | -20°C to +70°C  | -20°C to +70°C  | -20°C to +70°C  | -20°C to +70°C  |
| Colour:  | Black   | Black   | Black   | Black   |
| RoHS   | Compliant   | Compliant   | Compliant   | Compliant   |