Raw Data

IP68

Ethernet Buccaneer® environmentally sealed connectors

B BULGIN

Ethernet Buccaneer®

IP68

Screw thread nut provides secure coupling system

Shroud for RJ45 provides protection against damage through mis-use and positive alignment for mating of connectors

Gasket maintains IP68 seal to panel

Sealing gland and cage optimised to maintain IP68 seal and provide secure cable restraint without disrupting signal

'O' ring maintains IP68 seal at connector interface

Shielded Cat 5e coupler maintains screening

With Ethernet extending from the office to the factory floor and beyond into external environments, the demand for a secure connection for data applications is dramatically increasing.

This system is based upon the tried and tested Standard Buccaneer connector. It offers a secure connection for Ethernet based networks running up to 100Mbps, using the industry standard RJ45 connector as the base connection.

The system uses shielded connectors and couplers with S-FTP stranded cable to provide a high level of noise immunity.

Patchcords have been independently tested to TIA/ EIA Cat 5e levels.

FEATURES AND BENEFITS

Compatible with standard shielded RJ45 components.
Protection for RJ45 interface against contact damage/wear due to mechanical vibration.

■ IP68 rated	▷ Dust and water sealing
■ Cat 5e compliant	▷ Data rate up to 100MHz
■ PE jacket on cable	▷ Good chemical and water resistance
■ Shielded system	▷ High noise immunity and EMI protection
■ Cat 5e shielded coupler	▷ Maintains shielding
■ Shroud on RJ45	▷ Protection from abuse and mis-mating
■ Screw coupling	▷ Secure, proven locking system
■ Re-wireable version	▷ Ability to 'field' terminate
■ Earth lead	▷ Maintains shielding of panel mount connector

PART NUMBERS

Re-wireable flex connectors

PX0834/A	Glanding optimised for use with PE Jacket cable to maintain Cat 5e performance
PX0834/B	Suitable for use with cables of diameter from 3.5 to 8mm dia

Patch cord flex connectors

PX0830/2M00	Wire end	2m	RJ Buccaneer to bare end
PX0830/3M00	Wire end	3m	RJ Buccaneer to bare end
PX0830/5M00	Wire end	5m	RJ Buccaneer to bare end
PX0831/2M00	Single ended	2m	RJ Buccaneer to Shielded RJ45
PX0831/3M00	Single ended	3m	RJ Buccaneer to Shielded RJ45
PX0831/5M00	Single ended	5m	RJ Buccaneer to Shielded RJ45
PX0832/2M00	Double ended	2m	RJ Buccaneer to RJ Buccaneer
PX0832/3M00	Double ended	3m	RJ Buccaneer to RJ Buccaneer
PX0832/5M00	Double ended	5m	RJ Buccaneer to RJ Buccaneer

Panel mounting connectors

PX0833	Cat 5e Coupler
PX0833/E	Cat 5e Coupler + earth wire

Accessories

|	
PX0835	Sealing Cap for flex connectors
PX0733	Sealing Cap for panel mounting connector
14151	Hand crimp tooling + die set
14152	PE Jacket Cable - 50m reels
14150	Replacement shielded RJ45

Ethernet Buccaneer®

IP68

RE-WIREABLE FLEX CONNECTOR
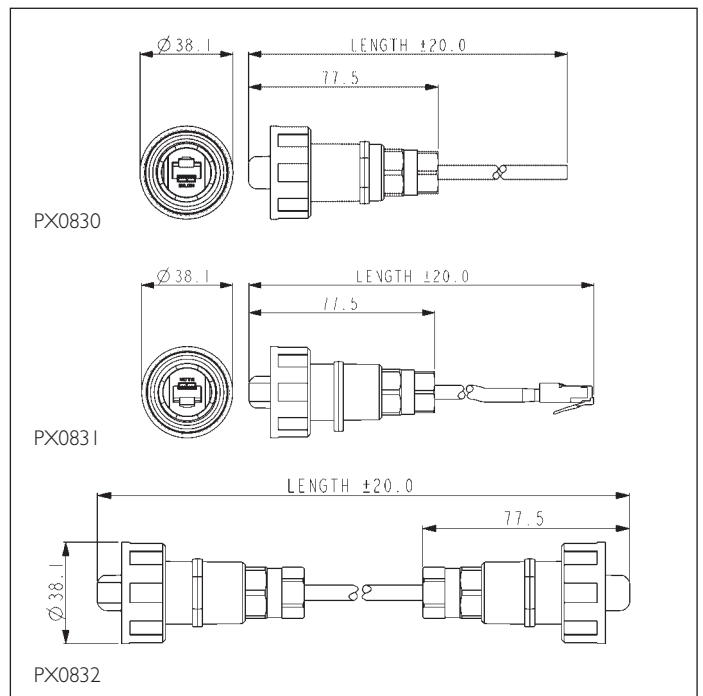
PX0834

- Re-wireable flex cable connector
- Supplied with shielded RJ45 plug
- Two versions:
    - for use with PE Jacket cable (Cat 5e)
    - for use with other cable sizes from 3.5 to 8mm dia.
- Mates with panel mounting connector

Ø 38.1 — 77.5
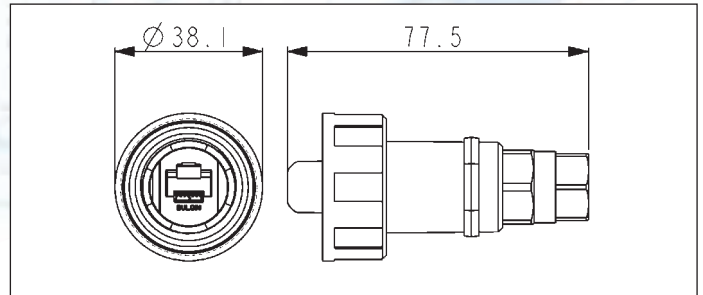
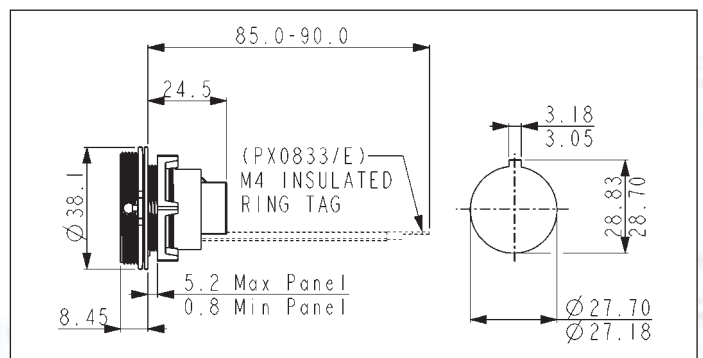## PATCH CORD FLEX CONNECTOR

PX0830

- Patchcords with IP68 connector
- Supplied with shielded RJ45 plug
- Single or double end terminated
- Standard lengths; 2m, 3m & 5m
- Mates with panel mounting connector
- S-FTP cable construction
- PE Jacket cable
- Wiring configuration to 568-B
- Exceeds EIA/TIA Cat 5e

PX0830 — Ø 38.1 — LENGTH ±20.0 — 77.5

PX0831 — Ø 38.1 — LENGTH ±20.0 — 77.5

PX0832 — LENGTH ±20.0 — Ø 38.1 — 77.5

PANEL MOUNTING CONNECTOR

PX0833

- Cat 5e shielded coupler
- For use with IP68 flex connectors
- Standard patchcord can be plugged into rear
- Version with earth wire available
- Single hole fixing
- Complete with panel sealing gasket

85.0-90.0
24.5
Ø 38.1
8.45
(PX0833/E) M4 INSULATED RING TAG
5.2 Max Panel
0.8 Min Panel
3.18
3.05
28.83
28.70
Ø 27.70
Ø 27.18

ACCESSORIES

Sealing Caps

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

PX0835 — 17.0 — 130.3 — Ø 38.0

PX0733 — 20.6 — 130.3 — Ø 38.0
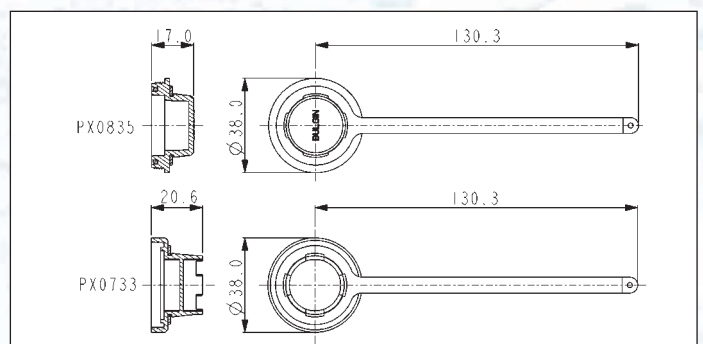
Ethernet Buccaneer® Connector

TECHNICAL SPECIFICATION

Stranded S-FTP Patch cord cable - PE Jacket

A cable with internal construction exceeding Cat 5e performance levels. Designed to cope with the rigours that applications in external environments demand. Its outer sheath provides good levels of resistance to water, oils and chemicals, will not crack with prolonged exposure to water or UV, and provides good abrasion resistance.

Construction

Conductors	26AWG 7/0.16mm bare copper
Insulation	Polyeolefin (0.94mm nominal)
Pair	2 of the above cores twisted
Core	4 of the above cores
Tape	1 lap of PEPT Tape
Screen	1 layer of PEPT and aluminium tape
0.1mm Tinned copper braid	
Sheath	PE Jacket Black
Operating Temperature	-25°C +60°C
Min. bend radius	8 x o/d (installation)
Min. bend radius	4 x o/d (installed)
Diameter	5.6mm nominal

Electrical @ 20°C

Characteristic Capacitance	100Ω ±15Ω @ 4MHz - 100MHz
Operating capacity	1600pF/km
Conductor Loop resistance	29Ω/100m maximum
Skew	40 nsec/100m @ 100MHz
Smoke index	IEC 61034
Acid Gas Emissions	IEC 60754
TIA/EIA Rating	Cat 5e

Flex & Panel mounted connectors

Mechanical

Sealing	IP68, EN60529

Materials

Connector Body	Glass filled Polyamide
Flammability rating	UL94-V0
'O' rings	Neoprene
Panel Gasket	Silicon
Operating Temperature	–20°C to +70°C

RJ45 Plug

Materials

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

Electrical

No. Conductors	8
Current rating	30V ac, 42V dc
Voltage rating	1.5A
Contact resistance	10mΩ max.
Performance	Cat 5 EIA/TIA 2840, annex B specification

RJ45 Coupler

Materials

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

Electrical

No. Conductors	8
Current rating	30V ac, 42V dc
Voltage rating	1.5A
Contact resistance	10mΩ max.
Performance	Cat 5 EIA/TIA 2840, annex B specification