


**IP68**

# EXPlora

EXPLORA



Independently tested for compliance to ATEX standards for use in Zone 2 and Zone 22 environments, the new EXP series is manufactured from a tough, high grade UL94V-0 rated Polyester material and provides environmental sealing to IP68. The ATEX coding is: Ex II 3 GD and the certificated no: Baseefa09ATEX0232X.

EXPlora is rated up to 18A, 600Vac/dc for 2, 3, 4 and 5 poles, 16A, 430Vac/dc for 7 pole and 10A, 250Vac/dc for 10 poles. The 3, 4, 5 and 7 pole versions have leading earth contacts making them suitable for single or three phase applications.

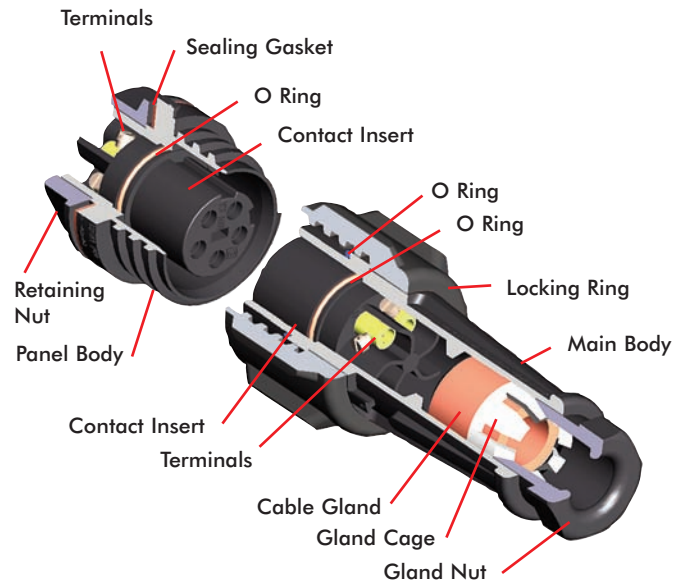
The EXPlora range is most suited to manufacturers of ancillary electrical equipment such as motors, pumps, lighting equipment, process and control gear for use in factories and plant where hazardous, or explosive atmospheres can be caused by flammable gases, mists or vapours or by combustible dusts.

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| EXP-A911       | Cable Connector - Large dia. cable         | 15   |
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# EXP Series EXPlora - Hazardous Area



IP68



- ATEX approval for Zone 2 and Zone 22 applications
- Independently tested
- ATEX Coding:  $\text{Ex II 3 GD}$
- ATEX Classification:  $\text{Ex nA IIC T6 Gc}$   
 $\text{Ex tc IIIC T85}^{\circ}\text{C Dc}$
- ATEX Certificate No: Baseefa09ATEX0232X
- IP68 rating tested at 1.054kg/sq cm (15lb/sq in) 10m depth for 2 weeks
- Up to 18A, 600V ac/dc rating
- 2, 3, 4, 5, 7 and 10 pole
- Leading earth contact for 3, 4, 5 & 7 pole versions
- Trailing Neutral on 5 pole
- Plug or socket connection in each body style
- Water and dustproof to IP68 when mated

- 'Scoop proof' contacts
- Field termination - screw terminations
- Positive locating keyways - cannot be mis-connected
- Sealing caps available to maintain IP68 rating of unmated connectors
- Compact design
- Easy assembly - no special tools required
- Single or 3 phase applications
- Cost effective solution
- Cable acceptance from 7 to 22mm O/D
- Two cable connector versions for 15mm and 22mm (maximum) cable diameters
- Separate strain relief on large cable version



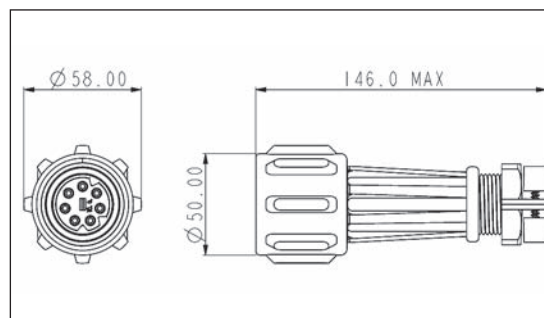
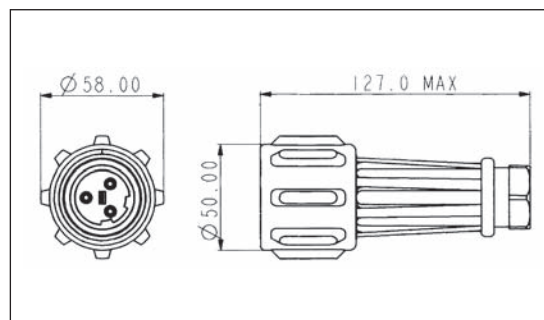
## EXP Series EXPLora - Hazardous Area Connector

### FLEX CABLE CONNECTOR


**EXP-0911**

**EXP-A911**

- Mates with in-line flex or panel mounting versions
- Positive, fast acting locking ring - can be turned with a gloved hand
- Plug or socket versions
- EXP-0 Series 13-15mm cable dia. acceptance as standard, 7-13mm with additional gland pack
- EXP-A Series 20-22mm cable dia. acceptance as standard, 14-20mm with additional gland pack
- Strain Relief Clamp (EXP-A Series only)



### Flex Cable

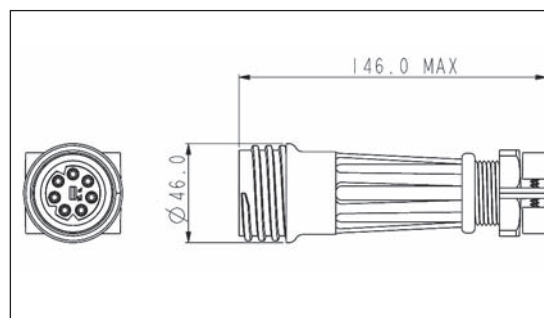
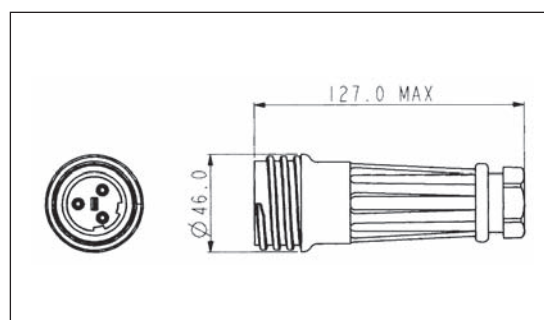
| Standard Cable | Large Cable   | Description  | Standard Cable | Large Cable   | Description    |
|----------------|---------------|--------------|----------------|---------------|----------------|
| EXP-0911/02/P  | EXP-A911/02/P | 2 pole Plug  | EXP-0911/02/S  | EXP-A911/02/S | 2 pole Socket  |
| EXP-0911/03/P  | EXP-A911/03/P | 3 pole Plug  | EXP-0911/03/S  | EXP-A911/03/S | 3 pole Socket  |
| EXP-0911/04/P  | EXP-A911/04/P | 4 pole Plug  | EXP-0911/04/S  | EXP-A911/04/S | 4 pole Socket  |
| EXP-0911/05/P  | EXP-A911/05/P | 5 pole Plug  | EXP-0911/05/S  | EXP-A911/05/S | 5 pole Socket  |
| EXP-0911/07/P  | EXP-A911/07/P | 7 pole Plug  | EXP-0911/07/S  | EXP-A911/07/S | 7 pole Socket  |
| EXP-0911/10/P  | EXP-A911/10/P | 10 pole Plug | EXP-0911/10/S  | EXP-A911/10/S | 10 pole Socket |

### IN-LINE FLEX CABLE CONNECTOR


**EXP-0921**

**EXP-A921**

- Mates with either EXP-0911 or EXP-A911 connectors
- Plug or socket versions
- EXP-0 Series 13-15mm cable dia. acceptance as standard, 7-13mm with additional gland pack
- EXP-A Series 20-22mm cable dia. acceptance as standard, 14-20mm with additional gland pack
- Strain Relief Clamp (EXP-A Series only)



### In-Line Flex Cable

| Standard Cable | Large Cable   | Description  | Standard Cable | Large Cable   | Description    |
|----------------|---------------|--------------|----------------|---------------|----------------|
| EXP-0921/02/P  | EXP-A921/02/P | 2 pole Plug  | EXP-0921/02/S  | EXP-A921/02/S | 2 pole Socket  |
| EXP-0921/03/P  | EXP-A921/03/P | 3 pole Plug  | EXP-0921/03/S  | EXP-A921/03/S | 3 pole Socket  |
| EXP-0921/04/P  | EXP-A921/04/P | 4 pole Plug  | EXP-0921/04/S  | EXP-A921/04/S | 4 pole Socket  |
| EXP-0921/05/P  | EXP-A921/05/P | 5 pole Plug  | EXP-0921/05/S  | EXP-A921/05/S | 5 pole Socket  |
| EXP-0921/07/P  | EXP-A921/07/P | 7 pole Plug  | EXP-0921/07/S  | EXP-A921/07/S | 7 pole Socket  |
| EXP-0921/10/P  | EXP-A921/10/P | 10 pole Plug | EXP-0921/10/S  | EXP-A921/10/S | 10 pole Socket |

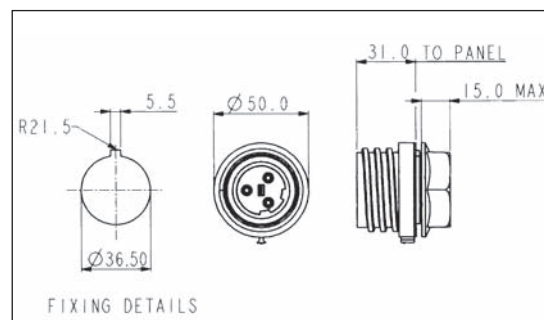
EXP Series EXPlora - Hazardous Area Connector 

### PANEL MOUNTING CONNECTOR



EXP-0931

- Mates with EXP-0911 and EXP-A911 connectors
- Single hole fixing
- Anti-rotation key
- High grade sealing gasket
- 3-7mm panel thickness



#### Panel Mounting

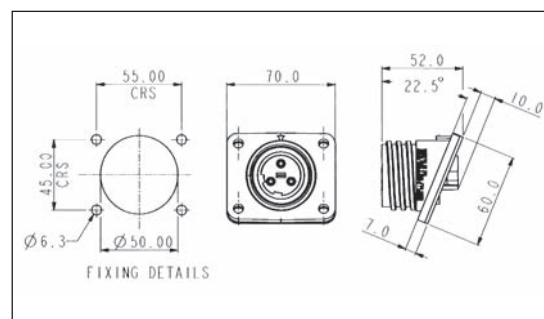
|               |              |               |                |
|---------------|--------------|---------------|----------------|
| EXP-0931/02/P | 2 pole Plug  | EXP-0931/02/S | 2 pole Socket  |
| EXP-0931/03/P | 3 pole Plug  | EXP-0931/03/S | 3 pole Socket  |
| EXP-0931/04/P | 4 pole Plug  | EXP-0931/04/S | 4 pole Socket  |
| EXP-0931/05/P | 5 pole Plug  | EXP-0931/05/S | 5 pole Socket  |
| EXP-0931/07/P | 7 pole Plug  | EXP-0931/07/S | 7 pole Socket  |
| EXP-0931/10/P | 10 pole Plug | EXP-0931/10/S | 10 pole Socket |

### FLANGE MOUNTING CONNECTOR



EXP-0941

- Mates with EXP-0911 and EXP-A911 connectors
- Supplied with high grade sealing gasket
- Supplied with sealing grommets for panel fixing screws (M6 thread recommended)



#### Flange Mounting

|               |              |               |                |
|---------------|--------------|---------------|----------------|
| EXP-0941/02/P | 2 pole Plug  | EXP-0941/02/S | 2 pole Socket  |
| EXP-0941/03/P | 3 pole Plug  | EXP-0941/03/S | 3 pole Socket  |
| EXP-0941/04/P | 4 pole Plug  | EXP-0941/04/S | 4 pole Socket  |
| EXP-0941/05/P | 5 pole Plug  | EXP-0941/05/S | 5 pole Socket  |
| EXP-0941/07/P | 7 pole Plug  | EXP-0941/07/S | 7 pole Socket  |
| EXP-0941/10/P | 10 pole Plug | EXP-0941/10/S | 10 pole Socket |

### ACCESSORIES



EXP-0990, EXP-0991, EXP-0992

- Heavy duty sealing caps to maintain IP68 rating of unmated connectors, with stainless steel straps

#### Sealing Caps

|          |                                                                     |
|----------|---------------------------------------------------------------------|
| EXP-0990 | Heavy duty sealing cap for use with EXP-0911/xx/x and EXP-A911/xx/x |
| EXP-0991 | Heavy duty sealing cap for use with EXP-0921/xx/x and EXP-A921/xx/x |
| EXP-0992 | Heavy duty sealing cap for use with EXP-0931 and EXP-0941           |

#### Gland Packs

|          |                                                                                                                  |
|----------|------------------------------------------------------------------------------------------------------------------|
| EXP-0980 | Pack of 3 additional cable glands for EXP-0911 and EXP-0921 to suit cable sizes; 11-13mm, 9-11 and 7-9mm dia.    |
| EXP-A980 | Pack of 3 additional cable glands for EXP-A911 and EXP-A921 to suit cable sizes; 18-20mm, 16-18 and 14-16mm dia. |



| SPECIFICATION              |                                                                |                                 |                                                                                                                                                                              |
|----------------------------|----------------------------------------------------------------|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Electrical:                |                                                                | Mechanical:                     |                                                                                                                                                                              |
| No Poles:                  | 2, 3, 4, 5      7      10                                      | Sealing:                        | IP68, EN60529:2001 tested @ 1.054kg/sq.cm. (15lb/sq.in.) 10m depth for 2 weeks                                                                                               |
| Current Rating:            | 18A      16A      10A                                          | Cable Acceptance:               | EXP-0911 - EXP-0921 13 - 15mm O/D standard, 7-13mm with gland pack<br>EXP-A911 - EXP-A921 20 - 22mm O/D standard, 14 - 20mm with gland pack                                  |
| Voltage Rating:            | 600Vac/dc    430Vac/dc    250Vac/dc                            | Contact Accommodation:          | 2-7 pole - 2.5 to 4mm <sup>2</sup> (13 to 10AWG) conductor, single or multi stranded<br>10 pole - 0.75 to 2mm <sup>2</sup> (14 to 18AWG) conductor, single or multi stranded |
| Contact Resistance:        | <10mΩ (initial)                                                | Termination:                    | Axial screw terminals                                                                                                                                                        |
| Insulation Resistance:     | >10 <sup>6</sup> MΩ (@ 500V dc)                                | Cable Retention force:          | 22mm dia, 150N<br>15mm dia, 150N<br>7mm dia, 80N                                                                                                                             |
| Dielectric strength:       | 2.2kV ac min                                                   | Gland Nut Torques:              |                                                                                                                                                                              |
| AC Breakdown voltage:      | 6kV                                                            | EXP-0 range                     |                                                                                                                                                                              |
| Ambient Temperature Range: | -20°C to +55°C                                                 | 13-15mm (Yellow - std.)         | 3.16Nm (28lbf/in)                                                                                                                                                            |
| Standards:                 | ATEX Zone 2 and Zone 22<br>IEC60079-0:2007<br>IEC60079-15:2005 | 11-13mm (black)                 | 3.16Nm (28lbf/in)                                                                                                                                                            |
| ATEX Coding:               | Ex II 3 GD                                                     | 9-11mm (white)                  | 3.16Nm (28lbf/in)                                                                                                                                                            |
| ATEX Certificate No:       | Baseefa09ATEX0232X                                             | 7-9mm (dark grey)               | 3.16Nm (28lbf/in)                                                                                                                                                            |
| ATEX Classification:       | Ex nA IIC T6 Gc<br>Ex tc IIIC T85°C Dc                         | EXP-A range                     |                                                                                                                                                                              |
|                            |                                                                | 20-22mm (Yellow - std.)         | 3.16Nm (28lbf/in)                                                                                                                                                            |
|                            |                                                                | 18-20mm (black)                 | 3.16Nm (28lbf/in)                                                                                                                                                            |
|                            |                                                                | 16-18mm (white)                 | 3.16Nm (28lbf/in)                                                                                                                                                            |
|                            |                                                                | 14-16mm (dark grey)             | 3.16Nm (28lbf/in)                                                                                                                                                            |
|                            |                                                                | Tightening Torques:             |                                                                                                                                                                              |
|                            |                                                                | Panel mount nut                 | 2.25 Nm                                                                                                                                                                      |
|                            |                                                                | Flange & Bulkhead fixing screws | 0.9 Nm                                                                                                                                                                       |
|                            |                                                                | Rear thread EXP-0931 series     | M36 x 2-6g                                                                                                                                                                   |
| Materials:                 |                                                                |                                 |                                                                                                                                                                              |
| Body Mouldings:            | Polyester                                                      |                                 |                                                                                                                                                                              |
| Cap Mouldings:             | Polycarbonate                                                  |                                 |                                                                                                                                                                              |
| Flammability Rating:       | UL94V-0                                                        |                                 |                                                                                                                                                                              |
| UV Resistance:             | To EN50021:1999                                                |                                 |                                                                                                                                                                              |
| Contacts:                  | Machined Solid Brass, Nickel plated                            |                                 |                                                                                                                                                                              |
| O Rings:                   | Nitrile                                                        |                                 |                                                                                                                                                                              |
| Panel Sealing Gasket:      | Silicone Rubber                                                |                                 |                                                                                                                                                                              |
| <b>RoHS</b>                | Compliant                                                      |                                 |                                                                                                                                                                              |

EXP Series EXPlora - Hazardous Area Connector 

PART NO SYSTEM

EXP-09 x x / xx / x / x

Series Designation

09 = Standard Cable Accommodation (7-13mm)  
A9 = Large Cable Accommodation (14-22mm)

Body Styles

1 = Flex, 2 = Flex In-line, 3 = Panel, 4 = Flange Panel

Contact Termination

1 = Screw Terminal

Number Contacts

02 = 2 pole, 03 = 3 pole, 04 = 4 pole,  
05 = 5 pole, 07 = 7 pole, 10 = 10 pole

Contact Type

P = Plug, S = Socket

Cable Acceptance

EXP-0 version:

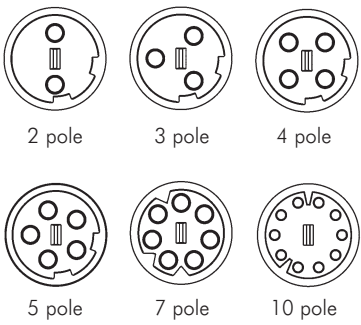
Blank = 13-15mm Yellow cable gland (std)  
3 = 11-13mm Black cable gland  
2 = 9-11mm White cable gland  
1 = 7-9mm Dark Grey cable gland

EXP-A version:

Blank = 20-22mm Yellow cable gland (std)  
9 = 18-20mm Black cable gland  
8 = 16-18mm White cable gland  
7 = 14-16mm Dark Grey cable gland

**Example:**  
EXP-0911/07/P/3 = Flex cable connector with standard cable accommodation body, seven pin contacts, with gland to suit 11-13mm cable.

CONTACT LAYOUT



DIMENSIONS

|                                                       |                                             |
|-------------------------------------------------------|---------------------------------------------|
| Overall dimensions of connectors when mated together: |                                             |
| EXP-0911 + EXP-0921                                   | 230 mm max.                                 |
| EXP-A911 + EXP-A921                                   | 270 mm max.                                 |
| EXP-0911 + EXP-0931                                   | 135 mm max. (to panel)                      |
| EXP-A911 + EXP-A931                                   | 175 mm max. (to panel)                      |
| EXP-0911 + EXP-0941                                   | 145 mm max. (to panel, mid point on flange) |
| EXP-A911 + EXP-A941                                   | 174 mm max. (to panel, mid point on flange) |