Solexy’s patented (7,057,105) Explosion-Proof / Intrinsically Safe Ethernet Coupler allows for transmissions of Ethernet into hazardous areas with a standard RJ45 connector.

With the Solexy Ethernet coupler it’s possible to connect any standard ethernet device located in a classified or safe area.

The BXF explosion proof and intrinsically safe barrier is certified for installation in classified areas and BAF intrinsically safe barrier is suitable for installation in safe areas and purged systems.

The BXF is designed to be used with any UL, CSA, MSHA or ATEX listed explosion proof housing without the need of a seal fitting, taking up no internal space.

The BAF is designed to be used in safe area directly with any CAT5 or CAT5e cable system. The BAF can also be remote mounted up to 100 meters away with minimal loss of signal. The BAF is also designed to be used with air purge panel systems. A BXF and/or BAF coupler is required on each end of a cable installation for full protection of both the RX and TX lines.

**FEATURES**

- **Short Circuit, Over Voltage / Current Protection**
  Includes the required 1500 VDC dielectric circuit as required for use in a hazardous area environment.

- **No Sealing Fitting Required**
  Fitting is pre-approved for hazardous locations and can be installed with no potting compounds and a simple wrench. Eliminates the need for costly seal fittings, and reduces the chance of error associated with field installed sealing practices.

- **Corrosion Resistant**
  300 series stainless steel protects the fitting from corrosive environments, sealing fittings are typically constructed of aluminium or galvanized steel, neither being well suited for the process industry.

- **Environmental Protection**
  All required circuitry is recessed into fitting and encapsulated against harsh environments; this is impossible with conventional sealing methods.

- **Interchangeability**
  Ethernet cables can be connected/disconnected without powering down, and can be run in traditional cable trays.

- **Industrial M12 “D” coded connection**
  With this secure weather proof industrial connection, cable installation and removal can be accomplished without removing power.

**SPECIFICATIONS**

- Maximum Fault Voltage
  - RMS 250 V

- Frequency Range
  - up to 100 MHz

- Protection
  - 3.6 V

- Data connector (hazardous side)
  - M12 Industrial “D” coded connector
    - BXF = 300 SST (approximate weight 0.83 lbs)
    - BAF = T6 Aluminum nickel plated (approximate weight 0.44 lbs)
**NOMENCLATURE**

- **aaa** Barrier Type
  - BXF: Explosion Proof / Intrinsically Safe suitable for classified area
  - BAF: Intrinsically Safe suitable for safe area and purge panels
- **b** Thread Connection
  - 3: 3/4” NPT (available only for cULus and Atex)
  - M: M25x1.5 (Atex only)
  - S: 1 1/8”-12 UNF (MSHA only)
- **c** Housing Material
  - A: Aluminum (BAF only) T6 Nickel Plated
  - S: 300 series stainless steel
- **dd** Housing Connector
  - 01: Shielded M12 Female “D” coded
- **ee** Cable Connector
  - 01: RJ45 Plug Male
  - 02: Shielded M12 Male “D” coded
  - 03: Shielded M12 Female “D” coded
- **f** Approval
  - N: cULus
  - X: ATEX
  - M: MSHA
- **ggg** Cable Length
  - 018: 18” (457 mm) CAT5e (included in the 100 meters max)
  - ***: to be defined