## Ethernet Cable Applications

### CONSTRUCTION

**UTP**
Used in controlled environments with very little to no EMI/RFI. Used in home, small office and Enterprise business networks.

**Shielded**
For environments where EMI/RFI is present, such as near motors, generators and other “noise” generating machines.

**Double Shielded**
Used in extremely high EMI/RFI environments such as factories and processing plants where “noise” generating equipment including generators, power transmission lines, and electric motors are present.

**High Flex**
Used in continuous motion applications such as a robot arm control cable in a manufacturing environment.

### MATERIAL

**PVC**
Very common jacket and over mold compound used in basic small office/home office (SOHO), small to medium business (SMB) and Enterprise network applications. PVC burns rapidly and releases hazardous gases when burned. Applications consist of general open space connectivity (not used in walls or ceilings).

**LSZH**
Low Smoke Zero Halogen cables produce very little smoke when burned and release no halogen compounds including Fluorine, Chlorine, and Bromine. This type of cabling is typically used in confined spaces where human lives and expensive communications equipment reside. LSZH is used on ships, submarines, aircraft, terrestial vehicles etc.

**Plenum**
Plenum cabling is used in buildings in the plenum air space usually above ceiling tiles or in the plenum airspace under the flooring in a server room or data closet. Plenum cables will self extinguish and not re-ignite.

**PUR**
PUR or Polyurethane cabling is typically used in harsh or Industrial Ethernet networking applications where the presence of petroleum based contaminants, UV rays, and physical impacts occur. Applications include oil refineries, factory floor, manufacturing, processing industries (food and chemical) etc.