

## 3M™ Insulation Displacement Connectors



### 1.0 SCOPE: 1.1

Insulation Displacement Connectors (IDC) are ideal for splicing wires and cables in Irrigation and Low Voltage Lighting systems. The proven 3M concept allows the splices to be made without stripping the insulation from the wires. The application is for residential and commercial/industrial projects.

### 2.0 FEATURES: 2.1

**No stripping of wires:**  
The connector utilizes the proven 3M "Insulation Displacement Connector" method whereby a copper element cuts through the sides of the wire insulation and applies inward pressure to the copper conductor. This makes a secure, reliable connection.

**2.2 Two models/sizes:**  
The 316IR and the Moisture Guard Connector (MGC).

**2.3 A waterproof gel:**  
protects the electrical connection from moisture and water. For above ground installation, or in a valve box.

**2.4 Quick and easy to use:**  
Simply slide the un-stripped wires inside the connector ports and push the black lid down using a pair of long-handled pliers. The MGC has a soft gray boot that stays tightly around the wire as it is inserted into the connector to keep the gel inside.



**2.5 The insulation does not shrink back:**  
During the installation process, wire is sometimes stretched. When the wire is cut, the insulation slowly shrinks back. Because the copper blades of IDC's only cut the sides of the insulation, it is held inside the gel-filled connector.

**2.6 The wire range:**  
is ideal for residences, commercial and industrial projects. The two outer ports are used for Irrigation wire or Low Voltage Landscape Lighting cable.

**2.7 Rated for 30 volts:**  
Listed under UL486C for USA and Canada.

**2.8 Made in the USA by the 3M Company:**  
Unquestioned quality by a name you can trust.

| Model | WIRE RANGE                              |   |                                   |                                 |
|-------|---|---|-----------------------------------|---------------------------------|
|       | Outer ports                             |   | Center ports                      |                                 |
|       | AWG                                     | mm <sup>2</sup>                             | AWG                               | mm <sup>2</sup>                 |
| 316IR | 22 to 16<br>solid or stranded           | 0,3 to 1,3<br>solid or stranded             | 22 to 16<br>solid or stranded     | 0,3 to 1,3<br>solid or stranded |
| MGC   | 16 to 14 solid and<br>16 to 12 stranded | 1,3 to 2,1 solid and<br>1,3 to 3,3 stranded | 18 solid and<br>20 to 18 stranded | 0,3 to 1,3<br>solid or stranded |

| PACKAGING DETAILS |                |                     |   |
|-------------------|----------------|---------------------|---|
| PAIGE PART NUMBER | 3M Part Number | Qty per case        |   |
| 270228R           | 316IR          | 300 (10 bags of 30) |  |
| 270MGC            | MGC            | 250 (10 bags of 25) |   |
| 270MGCJUG         | MGC-JUG        | 400 (4 jugs of 100) |  |

