The second example shows the RPC49-205 can be utilized to communicate with other Ethernet devices. The FISCO7 power supply is used. The DPC is computer for asset management. This feedback to the host or to a separate system also provides high-speed Ethernet modules in a rack to power the field devices. The specifications for fieldbus H1 physical media are defined by IEC 61158-2 and the ISA-S50.02 Part 2 Physical Layer. Communication Signal Conditioner (RPC)

The DPC (Diagnostic Power Conditioner) uses power conditioner modules in a rack to power the field devices. The diagnostics module monitors the electrical parameters and segments and the power supply module. The diagnostics data from the H1 segments is transmitted via the HSE interface module (DPC-49-HSEFD/24VDC) to the higher power supply modules (DPC-49-IPS) and one diagnostic module (DPC-49-ADU). Up to four H1 segments and the power supply module. The diagnostics data (network data) to FF Power Conditioners. The diagnostics data in a rack to power the field devices.

<table>
<thead>
<tr>
<th>Type</th>
<th>Cable Description</th>
<th>Conductor Size</th>
<th>Maximum Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type A</td>
<td>Shielded, Multi-Twisted Pair</td>
<td>22 AWG</td>
<td>800 meters (2624 feet)</td>
</tr>
<tr>
<td>Type B</td>
<td>Shielded, Multiconductor</td>
<td>22 AWG</td>
<td>1200 meters (3936 feet)</td>
</tr>
<tr>
<td>Type C</td>
<td>Multi-Twisted Pair</td>
<td>26 AWG</td>
<td>1800 meters (5905 feet)</td>
</tr>
<tr>
<td>Type D</td>
<td>Multiconductor</td>
<td>26 AWG</td>
<td>2600 meters (8530 feet)</td>
</tr>
<tr>
<td>Type E</td>
<td>Multi-Twisted Pair</td>
<td>22 AWG</td>
<td>900 meters (2953 feet)</td>
</tr>
</tbody>
</table>

The diagnostics information is collected in the device and transmitted to the H1 controller in the device and transmitted to the higher power supply modules. The diagnostics data is transmitted via the HSE interface module (DPC-49-HSEFD/24VDC) to the higher power supply modules (DPC-49-IPS) and one diagnostic module (DPC-49-ADU). Up to four H1 segments and the power supply module. The diagnostics data (network data) to FF Power Conditioners. The diagnostics data in a rack to power the field devices. The diagnostics data is transmitted via the HSE interface module (DPC-49-HSEFD/24VDC) to the higher power supply modules (DPC-49-IPS) and one diagnostic module (DPC-49-ADU). Up to four H1 segments and the power supply module. The diagnostics data (network data) to FF Power Conditioners. The diagnostics data in a rack to power the field devices. The diagnostics data is transmitted via the HSE interface module (DPC-49-HSEFD/24VDC) to the higher power supply modules (DPC-49-IPS) and one diagnostic module (DPC-49-ADU). Up to four H1 segments and the power supply module. The diagnostics data (network data) to FF Power Conditioners. The diagnostics data in a rack to power the field devices.

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## Vacuum Side Descriptions

<table>
<thead>
<tr>
<th>Fieldbus Side Description</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area Classification</td>
<td></td>
</tr>
<tr>
<td>Conformity to US Requirements</td>
<td></td>
</tr>
<tr>
<td>Temperature Class</td>
<td></td>
</tr>
<tr>
<td>Approvals</td>
<td></td>
</tr>
<tr>
<td>Voltage Supply</td>
<td></td>
</tr>
<tr>
<td>Input / Output</td>
<td></td>
</tr>
</tbody>
</table>

## Area Classification

- **Not Normally Present:** Division 2 Zone 2 Zone 2 (Zone 22-dust)
- **Present:** Zone 1 Zone 1 (Zone 21-dust)

### Temperature Class

- **T3:**
  - 300°C
  - 260°C
  - 160°C
  - 165°C
  - 85°C
  - 60°C

### Gas Group

- **Acetylene A**
- **Propane D**
- **Butane**
- **Methane**
- **Ethylene**

## Electrical Parameters

- Designed to connect a large number of field devices without a centralized power supply.
- The MBD49-T415/Ex is HART compatible, and may be used in Division 2, zones 1 and output modules for connection of discrete and analog locations. It provides bus-compatible, decentralized input excom pair for each device.

### Foundation Fieldbus

- Designed to replace the standard 4 to 20mA transmission technology for both FOUNDATION fieldbus display.

### Product Range

- **Input**
  - DM80Ex I/O module NAMUR discrete 8 8
  - AO40Ex O module analog 4
  - TI40Ex I module analog 4
- **Output**
  - DPC-49-ADU diagnostic unit
  - DPC-49-MB-RC backplane
  - RPC49-10 Ex conditioner
  - FISCO-49-MB-RC backplane
  - MBD49-T415 Ex multibarrier
  - MBD49-T416 Ex multibarrier

### Certification

- ATEX, FM C/US, UL
- IECEX
- NAMUR sensor

## Additional Information

- For further assistance, please call Application Support: 1-800-544-7769