The DN series are compact, rectangular multi-contact connectors developed to meet the demand for smaller and slimmer electronic equipment. 2.54 mm grid contact position and Direct dip soldering on PCB enable high density circuit designing at reduced cost. Aluminum die-cast shell and Metallic shell are shielded to prevent from Electro-Magnetic interference. 20, 26, 36 and 50 way available.

### Features

1. 2.54 mm grid contact position enable high density circuit designing.
2. Stable quality due to the contact design based on our field-proven SM series (D sub-connector).
3. One-touch lock system ensures perfect operation.
4. The cover case uses a thin, low-back compact design that meets the needs of high density mounting. It can be mounted between 17.78 millimeters (700mil) substrates.
5. The cover case is made of aluminum diecast to shield against electromagnetic waves in combination with a connector metal shell, the cover case is an ideal solution for noise.
6. Dip soldering connectors are provided with snap clamps for temporarily fixing the connector on the PCB.
7. IDC termination types are for standard 1.27 mm pitch cables, and are available for two types of cables: AWG26 and AWG28.
8. Crimp contact cables from AWG26 through AWG28.
9. Allows you to take out the cable vertically or horizontally, as your application requires.

### Application

Office Automation, Computers, Communications Equipment, Factory Automation, Home Automation and other commercial applications needing high density interconnections.
Specifications and Material

<table>
<thead>
<tr>
<th>Main specifications</th>
<th>Main materials used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current capacity</td>
<td>Shell</td>
</tr>
<tr>
<td>3A</td>
<td>Aluminum die-cast</td>
</tr>
<tr>
<td>Rated voltage</td>
<td>Silver coating</td>
</tr>
<tr>
<td>AC 200V</td>
<td>Insulator</td>
</tr>
<tr>
<td>Insulation resistance</td>
<td>PBT*</td>
</tr>
<tr>
<td>5000mΩ on higher at DC 500V</td>
<td>Black</td>
</tr>
<tr>
<td>Contact resistance</td>
<td>Contacts</td>
</tr>
<tr>
<td>20mΩ or less at DC 100mA</td>
<td>Phosphor bronze</td>
</tr>
<tr>
<td>Withstand voltage</td>
<td>Selective gold plating</td>
</tr>
</tbody>
</table>

(1) Series Number: DN
(2) Type
10: Right Angle Dip Type
30: IDC Plug Type
50: Crimp Type
(3) No. of Pins: 20, 26, 36 and 50 way
(4) P: Plug
S: Receptacle
(5) Shell
CVE1: Angle Cable Exit Shell
CV1: Straight Cable Exit Shell
(6) Applicable Wire
2628: AWG#26 ~ AWG#28
(7) Type of Contact Pin
PC1: Bulk Pin Contact
PC2: Chain Pin Contact
(8) Specification
(50): RoHS compliant

Ordering Information

DN 10 — 26 S ( )
(1) (2) (3) (4) (8)
(1) Series Number: DN
(2) Type
10: Right Angle Dip Type
30: IDC Plug Type
50: Crimp Type
(3) No. of Pins: 20, 26, 36 and 50 way
(4) P: Plug
S: Receptacle
(5) Shell
CVE1: Angle Cable Exit Shell
CV1: Straight Cable Exit Shell
(6) Applicable Wire
2628: AWG#26 ~ AWG#28
(7) Type of Contact Pin
PC1: Bulk Pin Contact
PC2: Chain Pin Contact
(8) Specification
(50): RoHS compliant

DN — 26 — CVE 1
(1) (3) (5)
DN 50 — 2628 PC 1
(1) (2) (6) (7)

Cable specifications

Pin: AWG#28(7/0.127)
AWG#26(7/0.16)
The product information in this catalog is for reference only. Please request the Engineering Drawing for the most current and accurate design information.

All non-RoHS products have been discontinued, or will be discontinued soon. Please check the products status on the Hirose website RoHS search at www.hirose-connectors.com, or contact your Hirose sales representative.

Crimp Pin Housing

IDC Plug
The product information in this catalog is for reference only. Please request the Engineering Drawing for the most current and accurate design information.

All non-RoHS products have been discontinued, or will be discontinued soon. Please check the product status on the Hirose website RoHS search at www.hirose-connectors.com, or contact your Hirose sales representative.

### Angle Cable Exit Shell

![Diagram of Angle Cable Exit Shell](image)

**DN-26-CVE1**

<table>
<thead>
<tr>
<th>HRS No</th>
<th>Set pix</th>
<th>Part No.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>RoHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>225-0028-1</td>
<td>20</td>
<td>DN-26-CVE1</td>
<td>45.9</td>
<td>127</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>225-0028-0</td>
<td>26</td>
<td>DN-26-CVE1</td>
<td>53.5</td>
<td>137</td>
<td>37</td>
<td>YES</td>
</tr>
<tr>
<td>225-0021-3</td>
<td>36</td>
<td>DN-36-CVE1</td>
<td>66.2</td>
<td>142</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>225-0022-6</td>
<td>50</td>
<td>DN-50-CVE1</td>
<td>84</td>
<td>142</td>
<td>12+13</td>
<td></td>
</tr>
</tbody>
</table>

### Straight Cable Exit Shell

![Diagram of Straight Cable Exit Shell](image)

**DN-26-CV1**

<table>
<thead>
<tr>
<th>HRS No</th>
<th>Set pix</th>
<th>Part No.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>RoHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>225-0031-7</td>
<td>20</td>
<td>DN-20-CV1</td>
<td>45.9</td>
<td>137</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>225-0024-1</td>
<td>26</td>
<td>DN-26-CV1</td>
<td>53.5</td>
<td>137</td>
<td>37</td>
<td>YES</td>
</tr>
<tr>
<td>225-0026-4</td>
<td>36</td>
<td>DN-36-CV1</td>
<td>66.2</td>
<td>142</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>

Unit: mm
Right Angle P.C. Mount Receptacle

**PCB Layout**

![PCB Diagram](image)

**DN10-26S (50)**

<table>
<thead>
<tr>
<th>HRS No.</th>
<th>Set no.</th>
<th>Part No.</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>RoHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>225-00014-60</td>
<td>20</td>
<td>DN10-26S (50)</td>
<td>32.0</td>
<td>38.9</td>
<td>22.8</td>
<td>VS</td>
</tr>
<tr>
<td>225-00014-60</td>
<td>26</td>
<td>DN10-26S (50)</td>
<td>38.6</td>
<td>46.5</td>
<td>30.4</td>
<td>VS</td>
</tr>
<tr>
<td>225-00020-50</td>
<td>36</td>
<td>DN10-26S (50)</td>
<td>52.3</td>
<td>59.2</td>
<td>43.1</td>
<td>VS</td>
</tr>
<tr>
<td>225-00031-50</td>
<td>50</td>
<td>DN10-26S (50)</td>
<td>70.1</td>
<td>77</td>
<td>60.9</td>
<td>VS</td>
</tr>
</tbody>
</table>

**Unit: mm**

**Mounting panel thickness 1.6mm**

![PCB End Diagram](image)
**Straight P.C. Mount Receptacle**

![Diagram of Straight P.C. Mount Receptacle]

**PCB Layout**

![Diagram of PCB Layout]

**Panel Cutout**

![Diagram of Panel Cutout]

**Note:**
1. Use a 1.6-mm thick panel.
2. The substrate reference drawing shows the connector-mounting surface. The area marked with [ ] is to be prohibited from entering any pattern.
3. The substrate and panel are related to each other, with a 0/3.2 mounting hole as the reference point.
4. The panel is 1.6 millimeters thick.
Pin Crimp Terminal

Applicable wire: AWG No.26 ~ AWG No.28

Outer diameter of applicable wire

Tooling (for Crimp Plug)

- CM-105 Crimp Machining

This machine has been carefully designed to meet the many requests for advanced crimping machines that can be used in a wider range of applications. This machine offers easy setup adjustment and applicator mounting. We are confident that the machine will find many applications as an easy-to-use semi-automatic machine for crimping strip contacts.

### Applicable Wire

<table>
<thead>
<tr>
<th>Way</th>
<th>20</th>
<th>26</th>
<th>36</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outer diameter</td>
<td>Max. 90</td>
<td>Max. 97</td>
<td>Max. 110</td>
<td>Max. 120</td>
</tr>
</tbody>
</table>

### Tooling (for Crimp Plug)

- CM-105 Crimp Machining

This machine has been carefully designed to meet the many requests for advanced crimping machines that can be used in a wider range of applications. This machine offers easy setup adjustment and applicator mounting. We are confident that the machine will find many applications as an easy-to-use semi-automatic machine for crimping strip contacts.

### Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Source</td>
<td>AC 100V 200W</td>
</tr>
<tr>
<td>Total Weight</td>
<td>75 kgs</td>
</tr>
<tr>
<td>Performance</td>
<td>2,000-4,000 crimps per hour</td>
</tr>
<tr>
<td>Work Range</td>
<td>Adaptable to other HIROSE dies</td>
</tr>
</tbody>
</table>

### Machines

- **Semi-Auto Machine**
  - CM-105 (CL901-0005-4)
  - Applicator (Die) 105-DN50 (CL901-0208-1)

- **Hand Tool**
  - DN50-TA2628HC (CL250-0101-0)
Tooling (for IDC Plug)

Hand Press
Pressure Block
Universal Guide Plate

Hi-Flex Termination Press and Accessories

General

The Hi-Flex termination press and its accessories connect the connectors to the HIF series ribbon cables more securely and quickly.

Features

1. No incomplete connections. A preventive ratcht-type device ensures against misconnections.
2. Prevents damage to connectors during connection. The guide plate works as a stopper to prevent damage to connectors due to connection pressure.
3. Easy to position the connector and cable. The guide plate case guide and cable stopper help positioning.
4. Capable of cable connection at an intermediate point when the cable stopper is removed.