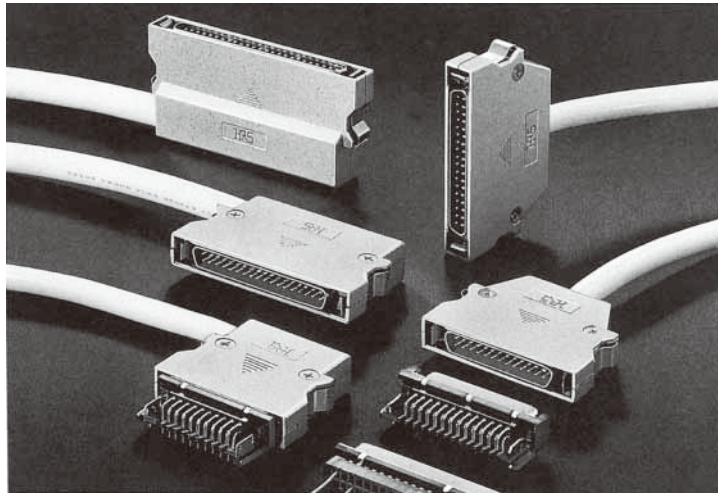


# DN SERIES-NEW D SUBMINIATURE INTERFACE CONNECTORS

## General

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 a 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

Main specifications	
Current capacity	3A
Rated voltage	AC 200V
Insulation resistance	5000mΩ on higher at DC 500V
Contact resistance	20mΩ or less at DC 100mA
Withstand voltage	1 minute AC 1000 Vrms

Main materials used		
Shell	Aluminum dei-cash	Silver coating
Insulator	PBT*	Black
Contacts	Phosphor bronze	Nickel plating and Selective gold plating

\*UL94V-0

## Ordering Information

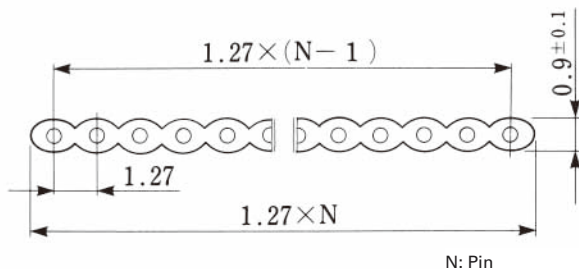
$\frac{\text{DN}}{(1)}$   $\frac{10}{(2)}$  —  $\frac{26}{(3)}$   $\frac{S}{(4)}$   $\frac{(\quad)}{(8)}$

$\frac{\text{DN}}{(1)}$  —  $\frac{26}{(3)}$  —  $\frac{\text{CVE 1}}{(5)}$

$\frac{\text{DN}}{(1)}$   $\frac{50}{(2)}$  —  $\frac{2628}{(6)}$   $\frac{\text{PC 1}}{(7)}$

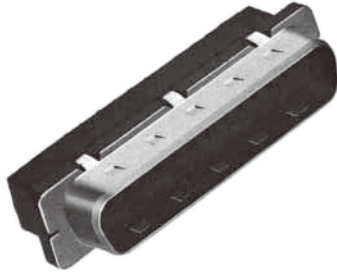
- (1) Series Number: DN
- (2) Type
  - 10: Right Angle Dip Type
  - 30: IDC Plug Type
  - 50: Crimp Type
- (3) No. of Pins: 20, 26, 36 and 50 way
- (4) P: Plug  
S: Receptacle
- (5) Shell
  - CVE1: Angle Cable Exit Shell
  - CV1: Straight Cable Exit Shell
- (6) Applicable Wire
  - 2628: AWG#26 ~ AWG#28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

## Cable specifications

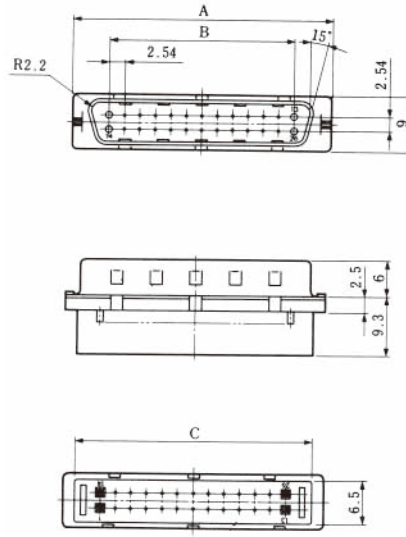


Pin: AWG#28(7/0.127)  
AWG#26(7/0.16)

## Crimp Pin Housing



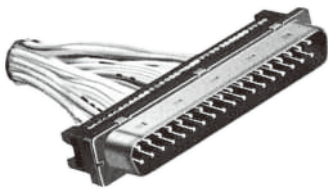
DN50-26P



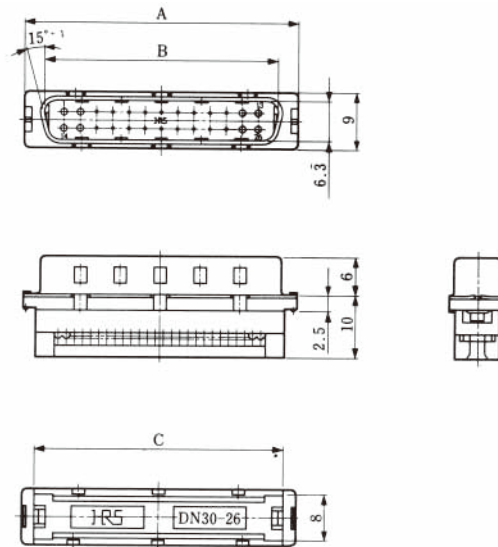
Unit: mm

HRS No.	Noof pin	Part No.	A	B	C	RoHS
225-0016-3	20	DN50-20P	35.36	22.86	31.38	YES
225-0004-4	26	DN50-26P	42.98	30.48	39	
225-0005-7	36	DN50-36P	55.68	43.18	51.7	
225-0006-0	50	DN50-50P	73.46	60.96	69.48	

## IDC Plug



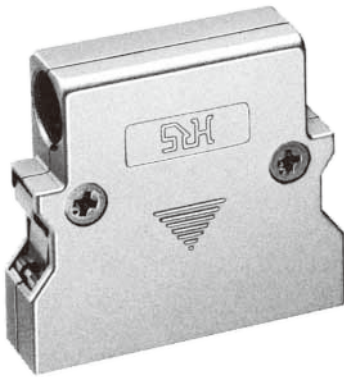
DN30-36P (50)



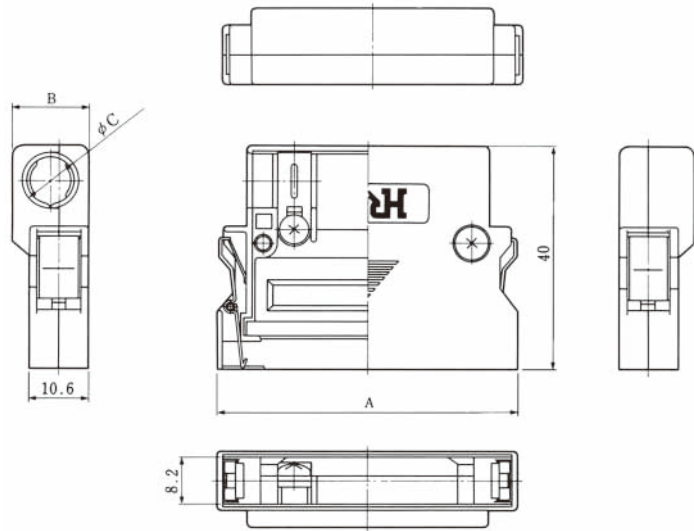
Unit: mm

HRS No.	Noof pin	Part No.	A	B	C	RoHS
225-0030-4-50	20	DN30-20P (50)	35.36	29.1	31.38	YES
225-0029-5-50	26	DN30-26P (50)	42.98	36.7	39	
225-0027-0-50	36	DN30-36P (50)	55.68	49.4	51.7	
225-0028-2-50	50	DN30-50P (50)	73.46	67.2	69.48	

## Angle Cable Exit Shell



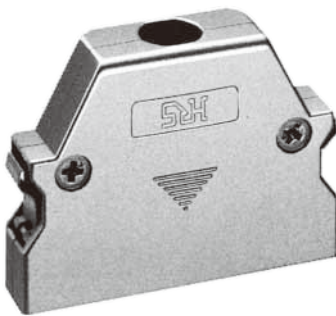
DN-26-CVE1



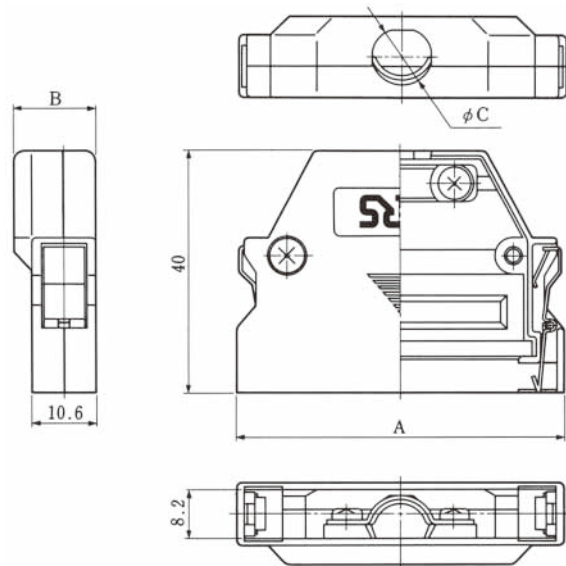
Unit: mm

HRS No.	No of pin	Part No.	A	B	C	RoHS
225-0019-1	20	DN-20-CVE1	45.9	12.7	9	YES
225-0020-0	26	DN-26-CVE1	53.5	13.7	9.7	
225-0021-3	36	DN-36-CVE1	66.2	14.2	11	
225-0022-6	50	DN-50-CVE1	84	14.2	12×13	

## Straight Cable Exit Shell



DN-26-CV1



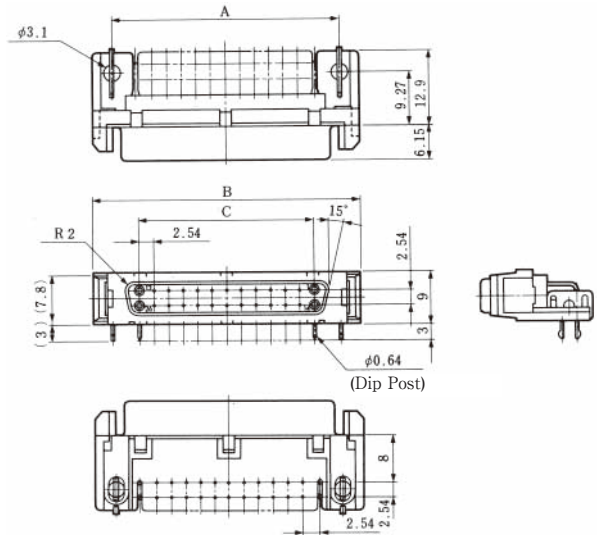
Unit: mm

HRS No.	No of pin	Part No.	A	B	C	RoHS
225-0031-7	20	DN-20-CV1	45.9	13.7	9	YES
225-0024-1	26	DN-26-CV1	53.5	13.7	9.7	
225-0025-4	36	DN-36-CV1	66.2	14.2	11	

## Right Angle P.C. Mount Receptacle



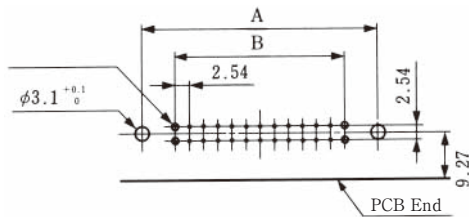
DN10-26S (70)



Unit: mm

HRS No.	Noof pin	Part No.	A	B	C	RoHS
225-0015-0-70	20	DN10-20S (70)	32	38.9	22.86	YES
225-0001-6-70	26	DN10-26S (70)	39.6	46.5	30.48	
225-0002-9-70	36	DN10-36S (70)	52.3	59.2	43.18	
225-0003-1-70	50	DN10-50S (70)	70.1	77	60.96	

## PCB Layout

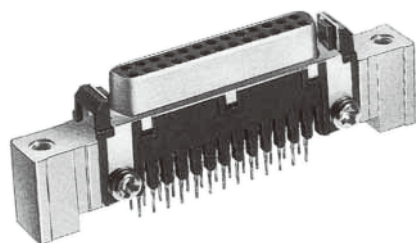


mounting panel thickness 1.6mm

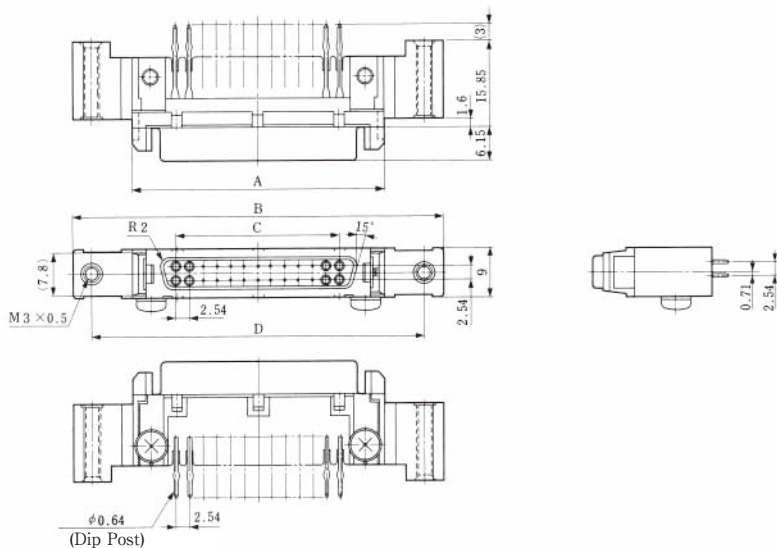
Unit: mm

Noof pin	20	26	36	50
A	32.0	39.6	52.3	70.1
B	22.86	30.48	43.18	60.96

## Straight P.C. Mount Receptacle



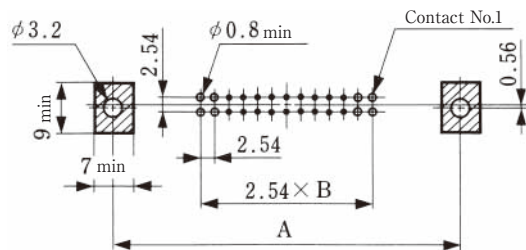
DN20B-26S (70)



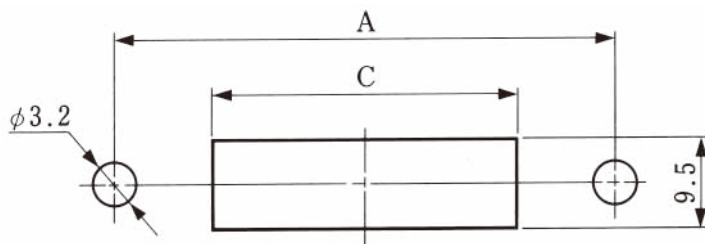
Unit: mm

HRS No.	No. of pin	Part No.	A	B	C	D	RoHS
225-0045-1-70	20	DN20B-20S (70)	38.9	60.9	22.86	53.9	YES
225-0046-4-70	26	DN20B-26S (70)	46.5	68.5	30.48	61.5	
225-0047-7-70	36	DN20B-36S (70)	59.2	81.2	43.18	74.2	
225-0048-0-70	50	DN20B-50S (70)	77	99	60.96	92	

## PCB Layout



## Panel Cutout

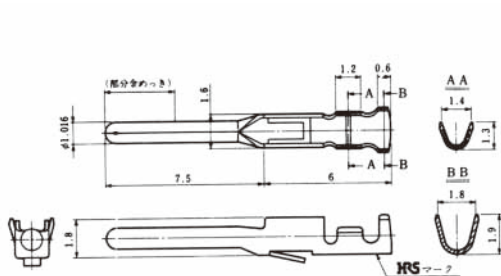


Unit: mm

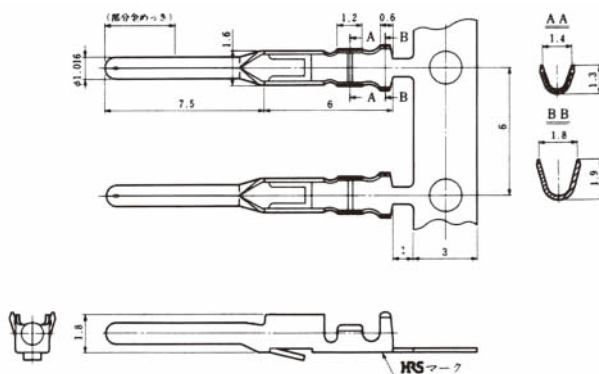
No. of pin	A	B	C
20	53.9	9	40.9
26	61.5	12	48.5
36	74.2	17	61.2
50	92	24	79

- 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



DN50-2628PC1  
(Bulk)



DN50-2628PC2  
(Chain)

Note: Bulk in bags of 100pc. Chain on reels of 1,000pcs

HRS No.	Part No.	Remarks	RoHS
225-0007-2	DN50-2628PC1	Loose piece contact	YES
225-0008-5	DN50-2628PC2	Strip contact	YES

## Applicable Wire

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

Outer diameter of applicable wire

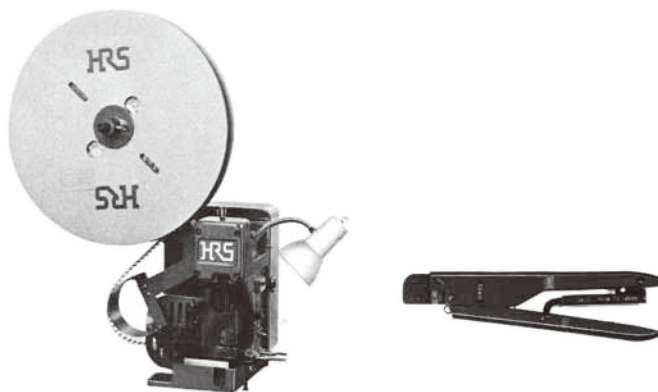
Unit: mm

Way	20	26	36	50
Outer diameter	Max. 9.0	Max. 9.7	Max. 11.0	Max. 12.0

## Tooling (for Crimp Plug)

- CM-105 Crimp Maching

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.



Semi-Auto Machine  
CM-105C  
(CL901-0001-0)  
Applicator (Die) AP105-DN50-2628P  
(CL901-2515-1)

Hand Tool  
DN50-TA2628HC  
(CL250-0101-0)

POWER SOURCE	AC 100V 200W
TOTAL WEIGHT	75 kgs
PERFORMANCE	2,000-4,000 crimps per hour
WORK RANGE	Adaptable to other HIROSE dies



## Tooling (for IDC Plug)

Hand Press



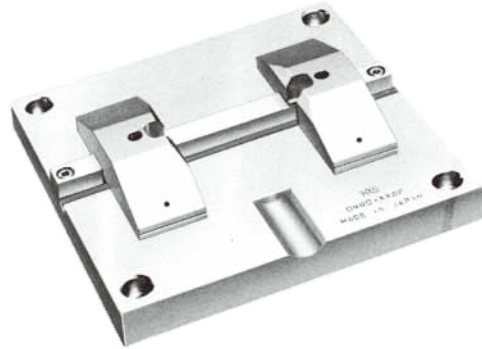
HRS No.	Part No.
550-0082-2	Hi-Flex termination press and accessories

Pressure Block



HRS No.	Part No.
902-0068-0	DN30-26PB
902-0069-3	DN30-36PB
902-0143-4	DN30-20PB
902-0144-7	DN30-50PB

Universal Guide Plate



HRS No.	Part No.
902-0067-8	DN30-XXGP

## 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.

