

# ELCO

A Division Of AVX Corporation



**DIN  
Connectors**

# Index by DIN Style

# ELCO

Introduction & Applications	4	Technical Specifications	11
Press-Fit	7	Plating	12
Design Aids	8	Military Cross Reference	12
Approvals	8		

STYLE	SERIES	ROWS		DESCRIPTION	APPLICATION	PAGE
<b>B</b>	8457	2	Header	.100 (2,54) x .100 (2,54) Grid, Standard MIL55302	Daughter Card, Wire to Board, Wire Wrap & Solder, Extender Card, Test Card	13
<b>C</b>	8457	3-4-5	Header	.100 (2,54) x .100 (2,54) Grid, Standard MIL55302	Daughter Card, Wire to Board, Wire Wrap & Solder, Extender Card, Test Card	15
<b>B</b>	8457	2	Receptacle	.100 (2,54) x .100 (2,54) Grid, Standard MIL55302	Rack Mount, Back Panel VME Bus, Wire Wrap & Solder	14
<b>C</b>	8457	3-4	Receptacle	.100 (2,54) x .100 (2,54) Grid, Standard MIL55302	Rack Mount, Back Panel VME Bus, Wire Wrap & Solder	17
<b>C</b>	8557	3	Header	.100 (2,54) x .100 (2,54) Grid, Standard SMC-High Temperature Insulator Material	Daughter Card, Wire to Board, Wire Wrap & Solder, Extender Card, Test Card	16
<b>C</b>	8557	3	Receptacle	.100 (2,54) x .100 (2,54) Grid, Standard SMC-High Insulator Temperature Material	Rack Mount, Back Panel VME Bus, Wire Wrap & Solder	18
<b>B</b>	8458	2	Header	.100 (2,54) x .100 (2,54) Grid, Standard Compliant Pin with Flange	Right-Angle Press Fit	19
<b>C</b>	8458	3	Header	.100 (2,54) x .100 (2,54) Grid, Standard Compliant Pin with Flange	Right-Angle Press Fit	19
<b>B</b>	8458	2	Receptacle	.100 (2,54) x .100 (2,54) Grid, Standard Compliant Pin with Flange	Press Fit, Back Panel, VME Bus	22
<b>C</b>	8458	3	Receptacle	.100 (2,54) x .100 (2,54) Grid, Standard Compliant Pin with Flange	Press Fit, Back Panel, VME Bus	23
<b>C</b>	8464	3	Receptacle	.100 (2,54) x .100 (2,54) Grid, Standard Wire Crimp	Crimp, Wire to Board	67
<b>C</b>	8159	3	IDC Receptacle	.100 (2,54) x .200 (5,08) Grid, Standard High Cable Retention Force	IDC Ribbon Cable	66
<b>C</b>	8459	3	IDC Receptacle	.100 (2,54) x .200 (5,08) Grid, Standard	IDC Ribbon Cable	65
<b>C</b>	8254	3	Receptacle	.100 (2,54) x .100 (2,54) Grid, Standard Round Wire Crimp	Crimp, Wire to Wire Crimp, Wire to Board	69
<b>D</b>	8447	2	Header & Receptacle	.200 (5,08) x .200 (5,08) Grid, Standard	Daughter Card & Backplane	25
<b>E</b>	8447	3	Header & Receptacle	.200 (5,08) x .200 (5,08) Grid, Standard	Daughter Card & Backplane	25
<b>F</b>	8487	3	Header & Receptacle	.200 (5,08) x .150 (3,81) Grid, Standard	Daughter Card & Backplane	27
<b>G</b>	8487	4	Header & Receptacle	.150 (3,81) Centers, Standard	Daughter Card, Backpanel Wire Wrap & Solder	27

# Index by DIN Style

# ELCO

STYLE	SERIES	ROWS		DESCRIPTION	APPLICATION	PAGE
<b>H</b>	8449	2	Header & Receptacle	10 + 2 Position	PC Solder Tail Screw Termination	32
<b>H</b>	8450	1	Header & Receptacle	11 Position	PC Solder Tail Faston	33
<b>H</b>	8453	2	Header	15 Position, Press Fit	Backpanel	35
<b>H</b>	8454	2	Receptacle	15 Position Crimp	Crimp Wire to Board	37
<b>H</b>	8456	2	Header & Receptacle	15 Position	PC Solder Tail, Faston, Solder Cup, Screw Termination	34
<b>M</b>	8483 8484	3	Header & Receptacle	.100 (2,54) x .100 (2,54) Grid Standard	PC Solder Tail, Wire Wrap Press Fit	39
<b>M</b>	8489		Special Contacts & Tooling		Coaxial, High Voltage & High Power Contacts	43
<b>Q</b>	8477	2	Header	.100 (2,54) x .100 (2,54) Grid Inverted, Compliant Pin	Rack Mount, Back Panel Motherboard & Versabus, Wire Wrap & Solder, Wire to Board, Parallel Board	47
<b>R</b>	8477	3-4-5	Header	.100 (2,54) x .100 (2,54) Grid Inverted	Rack Mount, Back Panel Motherboard & Versabus, Wire Wrap & Solder, Wire to Board, Parallel Board	49 & 53
<b>Q</b>	8477	2	Receptacle	.100 (2,54) x .100 (2,54) Grid Inverted	Daughter Card, Extender Card, Test Card	48
<b>R</b>	8477	3-4-5	Receptacle	.100 (2,54) x .100 (2,54) Grid Inverted	Daughter Card, Extender Card, Test Card	51 & 54
<b>R</b>	8577	3	Header	.100 (2,54) x .100 (2,54) Grid Inverted SMC-High Temperature Insulator Material	Rack Mount, Back Panel Motherboard & Versabus, Wire Wrap & Solder, Wire to Board, Parallel Board	50
<b>R</b>	8577	3-4	Receptacle	.100 (2,54) x .100 (2,54) Grid Inverted SMC-High Temperature Insulator Material	Daughter Card, Extender Card, Test Card	52
<b>Q</b>	8478	2	Header	.100 (2,54) x .100 (2,54) Grid Inverted, Compliant Pin	Press Fit, Back Panel, Versabus	57
<b>R</b>	8478	3-4-5	Header	.100 (2,54) x .100 (2,54) Grid Inverted, Compliant Pin	Press Fit, Back Panel, Versabus	58
<b>Q</b>	8478	2	Receptacle	.100 (2,54) x .100 (2,54) Grid Inverted, Compliant Pin	Right-Angle Press Fit	60
<b>R</b>	8478	3-4-5	Receptacle	.100 (2,54) x .100 (2,54) Grid Inverted, Compliant Pin	Right-Angle Press Fit	60
	9075	2-4	Hybrid	Power & Signal	Power & Signal Transmission	70

## Accessories

	8404		Cover	Crimp or IDC for Style C R & M	Wire to Wire Wire to Board	75
	8442	3-4	Shroud	.100 (2,54) x .100 (2,54) Grid Standard	Input / Output	72
<b>C</b>	8237		Cover	8457 & 8254 Series	Wire to Wire Wire to Board	74
	2521		Ejector / Latch	Style C or 1/2 C 8459 Series Only		73
	2525		Powerpack		Press-in power connection	77

## Customer Application Tooling

78

# Index by Series Number

**ELCO**

SERIES	DESCRIPTION	PAGE
<b>2427</b>	Keying Strips	9
<b>2521</b>	Ejector / Latch	73
<b>2525</b>	Powerpack	77
<b>8159</b>	Style C IDC	66
<b>8237</b>	Cover	74
<b>8244</b>	Crimp Contacts	69
<b>8254</b>	Style C Crimp	69
<b>8267</b>	Keying Strips	9
<b>8404</b>	Cover	75
<b>8442</b>	Shroud	72
<b>8447</b>	Style D & E	25
<b>8449</b>	Style H10 + 2	32
<b>8450</b>	Style H11	33
<b>8453</b>	Style H15 Press Fit	35
<b>8454</b>	Style H15 Crimp	37
<b>8456</b>	Style H15	34
<b>8457</b>	Style B & C	13 & 17
<b>8458</b>	Style B & C Press Fit	19
<b>8459</b>	Style C IDC	65
<b>8464</b>	Style C Crimp	67
<b>8477</b>	Style Q & R	47 & 51 & 53
<b>8478</b>	Style Q & R Press Fit	57
<b>8483</b>	Style M	39
<b>8484</b>	Style M Press Fit	39
<b>8487</b>	Style F & G	27
<b>8489</b>	Style M - Special Contacts	43
<b>8557</b>	Style C - Surface Mount Compatible	16 & 18
<b>8577</b>	Style R - Surface Mount Compatible	50 & 52
<b>9075</b>	Hybrid	70

## The international standard

Today's high-density packaging applications are demanding high-density connectors with small envelope dimensions suitable for mounting to single or double-sided as well as multilayer printed wiring boards. At the same time, the internationalization of the electronics industry is requiring an equally international connector family of standard characteristics that combine metal-to-metal reliability and cost-effectiveness. The response to both these demands is the DIN connector family — the Euroconnector standard now finding increasing applications in the United States and around the world.

## DIN 41612

The DIN (Deutsches Institut für Normung) standard offers these significant improvements in performance and design over current printed circuit connectors:

- High contact density
- Low mating forces
- Two-piece protective design
- 2, 3, 4 and 5 Row

These common features ensure trouble-free assembly to the board, universal matability, and proper contact wipe within the matched tolerances of each DIN style. Different styles can be mixed — even though they cover a wide range of current-carrying capacities, contact densities and termination types side by side within the same rack.

## Broadest line

Elco offers the broadest line of DIN high-density connector solutions in the industry, including the 200-pin, 4-row connector in Series 8458 Standard, inverted, solder-in, and press-fit styles are available, featuring precision selective gold plating, low insertion and withdrawal forces, and positive alignment and mating.

## Volume production

Elco provides volume production lines in the United States and at three plants off shore, thus assuring production capacity to meet any requirement for prompt delivery at competitive prices.

## Elco - the first

Our production experience of more than a dozen years enabled us to become the first U.S. manufacturer to fully qualify its DIN connectors to MIL-C-55302/131-134 and 157-158, rounding out a series of approvals that includes VG 95324 (the West German defense standard) DIN 41612, British Post Office and IEC.

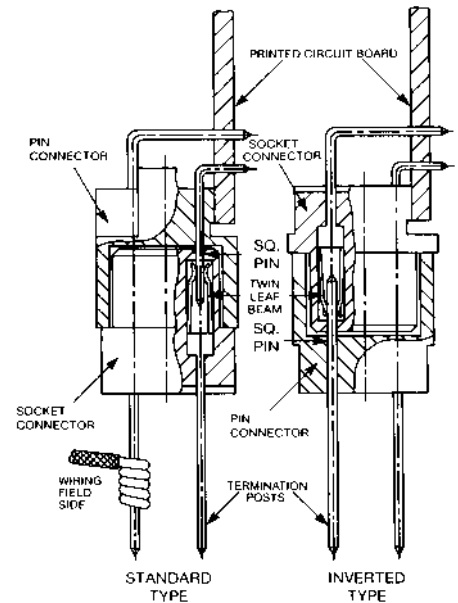
## DIN vs. card-edge connectors for P.C. interconnectors

Until now, the one piece edgeboard connector has dominated the market, primarily because of its low price. However, in a price comparison of both types, the costs of the contacts on the printed circuit board are often overlooked. These costs, furthermore, increase considerably when contact reliability requirements are increased. In such a case, the price balance between card-edge and two-piece connectors is quickly regained.

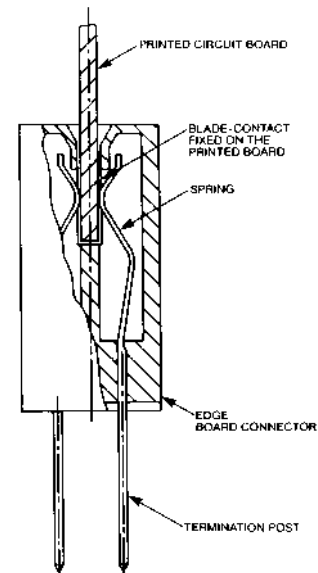
## Technical superiority

There are many technical reasons favoring the two-piece DIN connector in applications where the connector must meet stringent requirements:

- High level of reliability because of close control of tolerances on both mating surfaces.
- Pin and socket protected against external forces by an all-around collar.
- The socket of the two-piece connector grips the pin on both sides providing redundant contact points.
- Contact wear is reduced and permissible mating frequency is increased by avoidance of card-edge connector cutting edge.
- Two-piece connectors can be provided with two, three, four and five rows; card-edge connectors can only have two-row contacting.
- No need to change pattern on the P.C. board.
- No contact loss when contact keying strips are used on the side of the two-piece connector.
- Larger creepage paths and thus higher maximum operating voltages for two-piece connectors than for card-edge connectors.



Two piece connector

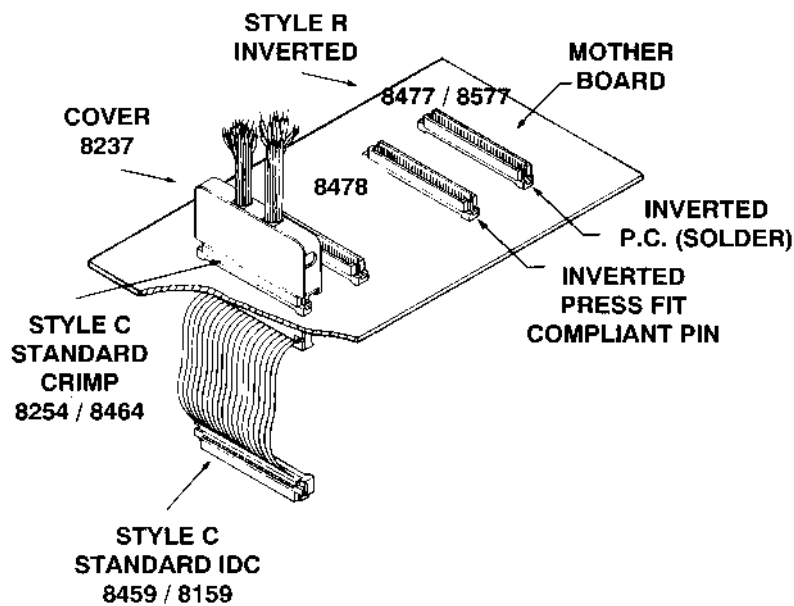


Card edge connector

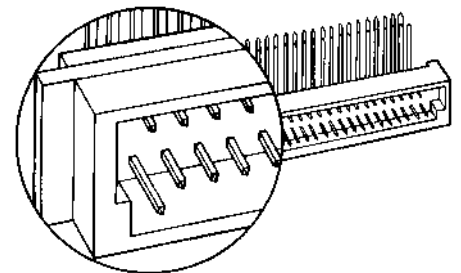
Elco's line of DIN high-density, low insertion and withdrawal force connectors meets the requirements of a wide variety of input / output and board-to-board applications. Connectors are available for single, double and multi-layer printed circuit boards with up to 200 contact positions, and up to five rows, in both standard and inverted styles. Select from such terminations as straight or right-angle, wire wrappable printed circuit through-hole, insulation displacement contact, crimp, and solder loop.

Mounting possibilities include rack, metalplate, solderless printed circuit press-fit, and inverted DIN. Elco's solderless press-fit interconnect technique is available in both standard and inverted designs, in straight and right-angle printed circuit through-hole configurations.

For more information, contact the factory, or the Elco representative or distributor nearest you.



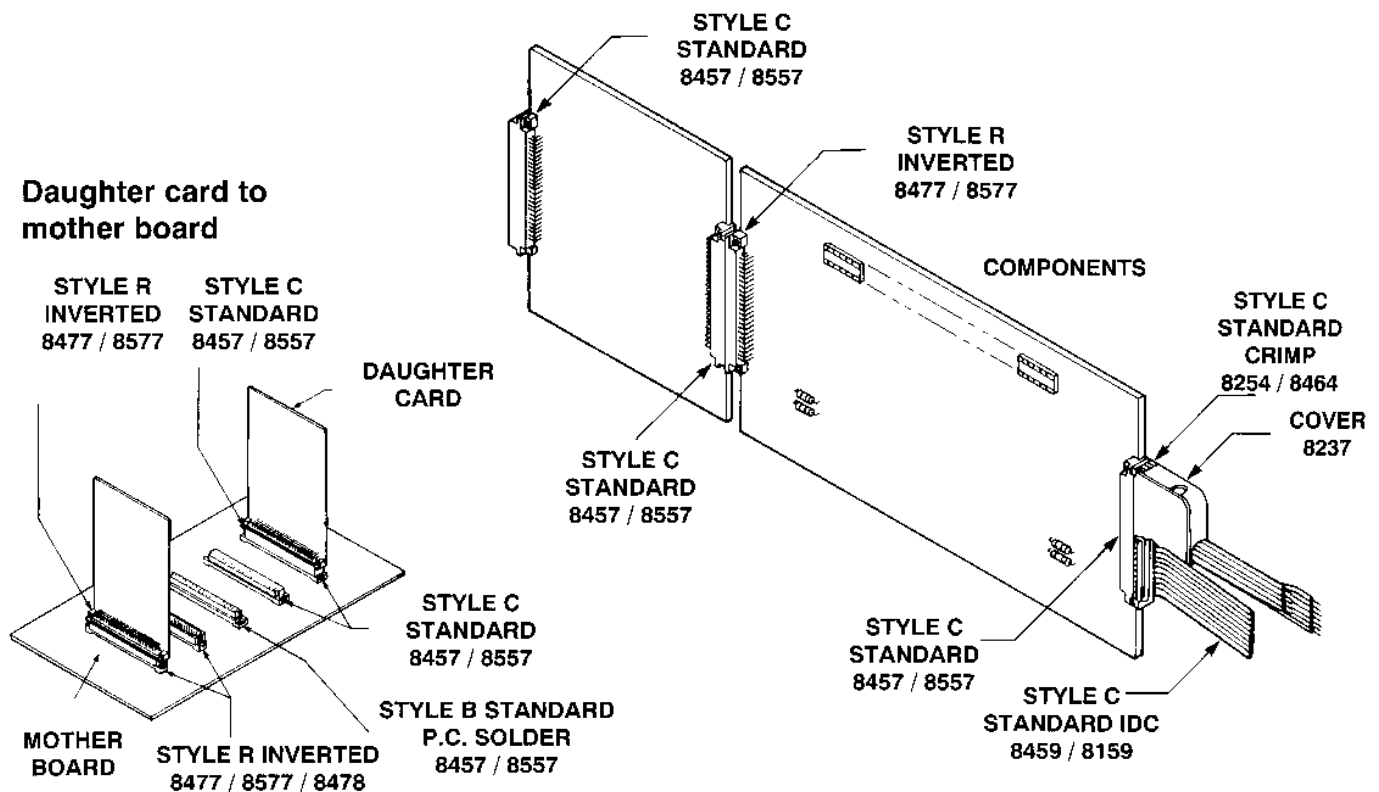
## Make-ground-before-signal Contacting Sequence



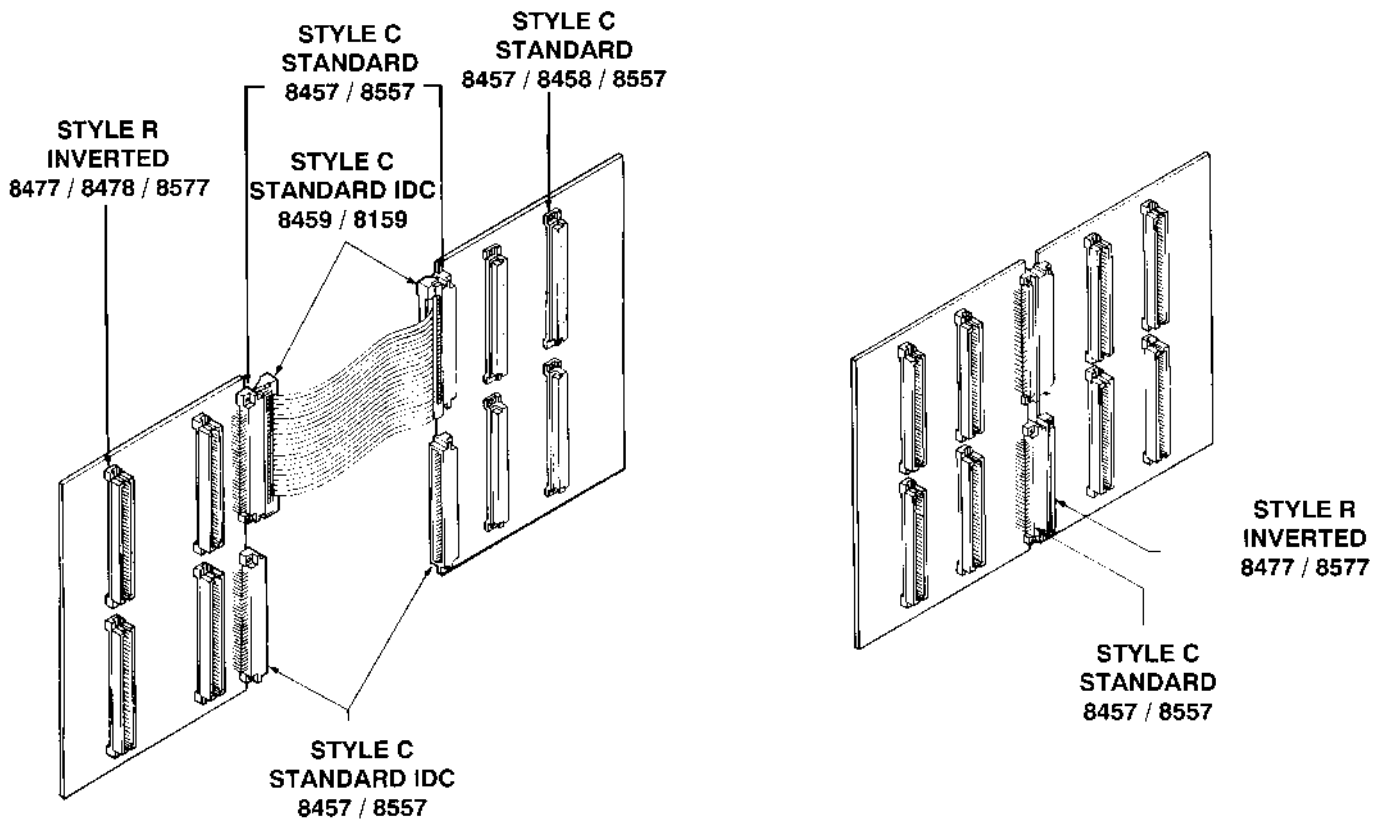
To order this feature, see  $\Delta$  symbol in contact designation code for each header connector series.

## Extender board / test card

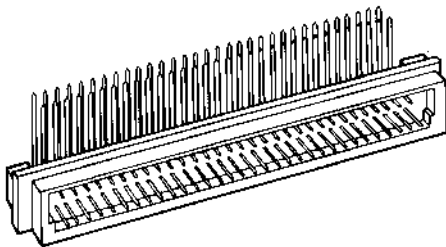
### Daughter card to mother board



## Mother boards in tandem

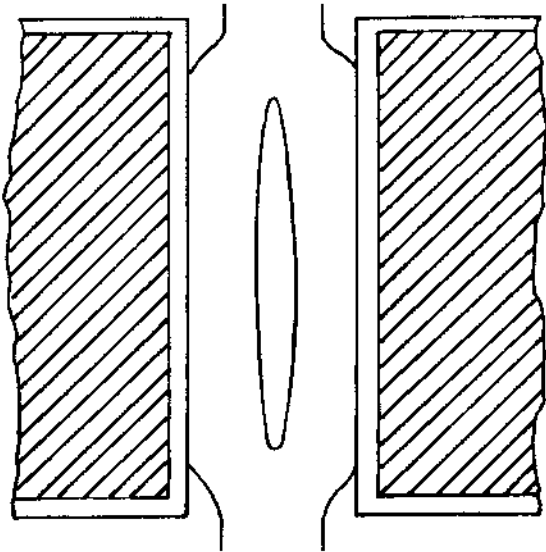


## Plug half with long right-angle post



Typically used for wire wrapped bread-board applications. To order, see contact designation code for each pin connector series.

## Standard or Inverted Straight or Right-Angle Press-Fit



ELCO offers a range of both standard and inverted DIN connectors for press-fit applications, including series 8448 / 8458 and 8478. (Series 8458 and 8478, standard and inverted, are also available in right-angle.)

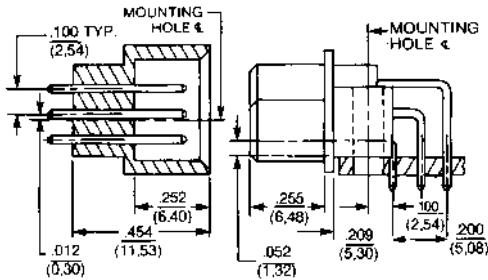
ELCO Press-Fit is a DIN variation. It is pressed into the printed circuit board according to DIN 41811, part 5 and IEC Publ. 352-5 without soldering. The ELCO VARIPIN™ contact has a specially formed compliant pin that mates with the plated through-hole of the printed circuit board which forms a gas-tight non-corrosive and vibrationless bond.

The straight receptacle configurations do not require ANY special tooling... they are a flat-rock design. The straight headers are press-fit into the backpanel in a single operation. The Elco supplied tool fits easily into the connectors and, once positioned, the connectors can be press fit into the board with an arbor or air-operated press. (Refer to applications tooling shown on page 78.)

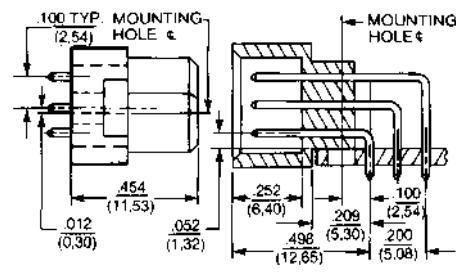
The right-angle configurations require a very simple press tool for the press process. The press force is directly over the press fit area. (Contact the factory for additional information.)



## Typical mounting dimensions

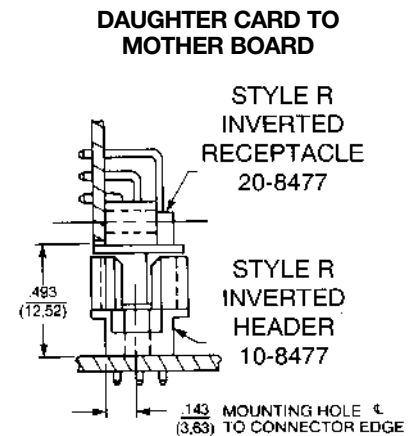
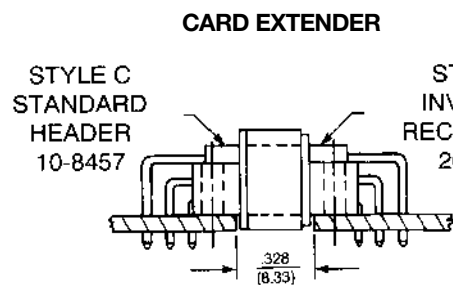
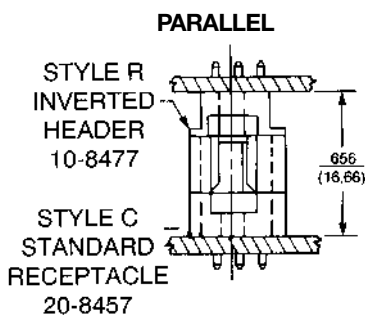


**STYLE R  
INVERTED**  
8477 / 8478 / 8577



**STYLE C  
STANDARD**  
8457 / 8458 / 8557

## Board-to-board mating dimensions



## Approvals

The ELCO DIN line is approved against all important standardization systems.

**DIN 41612** German "Deutsches Institut fur Normung" standards

**VG 95324** German Defense Standard

**CECC**

**IEC 603-1** Industrial Electrical Code

**MIL-C-55302** (DESC military specification)

**VDE**

UL File # E27610

2521 8458  
8254 8459  
8257 8477  
8442 8478  
8447 8557  
8457 8577



**BS 9000**

**BT**

**NFC 93.420**

**PTT**

**UTE C 93.420**

(British Post Office Standard)

(British Telecom)

('Switzerland, Italy, Spain)

CSA File # LR 40338

8457  
8458  
8477  
8487  
8557  
8577



## Keying

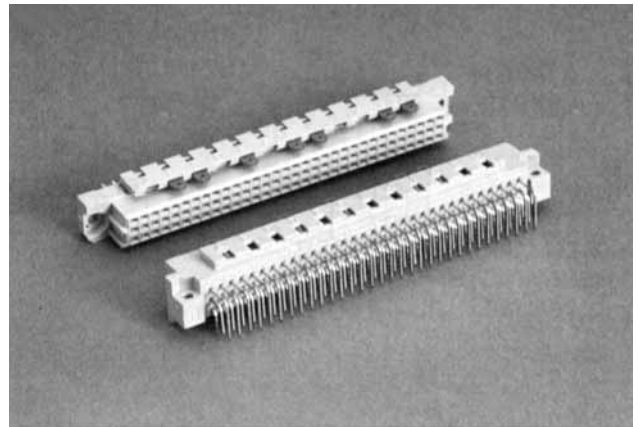
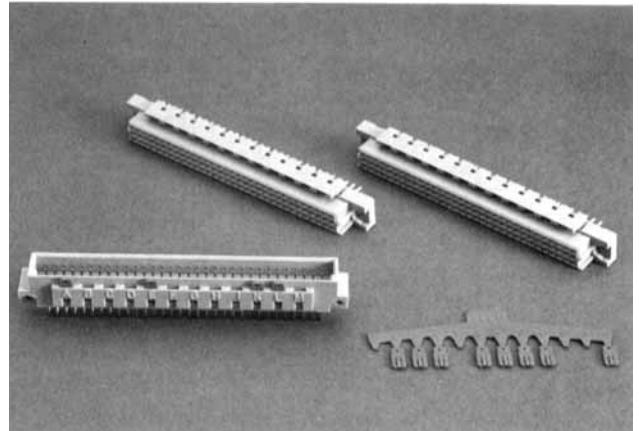
The Elco keying system provides a more versatile and cost-effective solution for multi-position assemblies with the following advantages.

- No breaking-off of plastic parts for keying purposes in plug or receptacle insulators.
- No tools required.
- Keying can be changed, keying mistakes can easily be corrected.
- Keys are supplied as handy strips carrying 12 keys. The needed number of keys is broken off the strip and put into the corresponding cavities of the male insulator. The balance of the keys (still on the strip) is inserted into the cavities of the keying system of the female insulator. The strip is then broken off. The ELCO-version with keys on a strip is a considerable advantage against competitors' solutions using loose coding keys.
- Keying versatility (924 different positions).
- Compatible with leading manufacturers' products.
- Keys are available in white or red color.
- Styles B, C, D\*, E, Q, R and 1/2C are available.

## Ordering Codes

Plastic keying strip, red	60 2427 30 74 12 000
Plastic keying strip, white	60 2427 30 14 12 000
Metal keying strip, single	60 2427 40 10 00 000

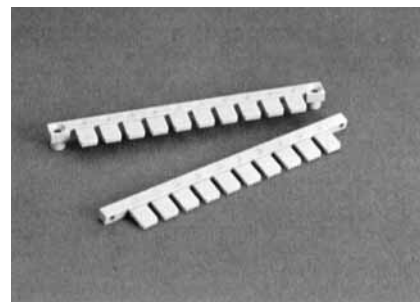
Style D square post .024 X .024 (0,6 mm x 0,6 mm)  
available with integrated keying.



## Keying

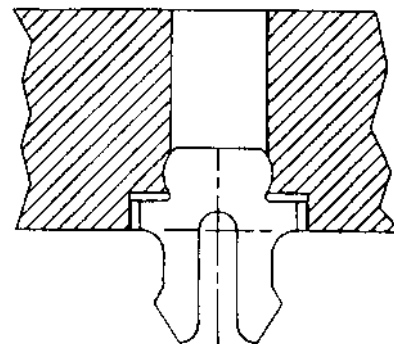
Elco Keying Strips provide positive daughter-board to backpanel keying for multi-position assemblies. Key tabs are easily removed with pliers.

Part # 30-8267-9210



## Board Retention Clips

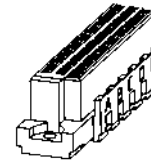
Available on Elco DIN (Right-angle & straight, headers & receptacles)... Clips are installed at the factory or can be value-added at an Elco franchised distributor. Board retention clips eliminate the need for mounting hardware. They are designed to hold the connector in place during soldering.



## How to Key

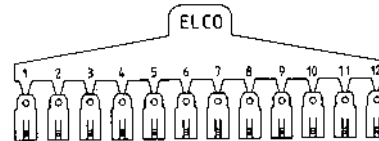
Each, plug and receptacle insulator, have cavities. Picture 1

Marked by letters from A to M.



The keys attached to the strip fit into these cavities. Picture 2

They are marked by figures from 1 to 12.



The keys 1, 2, 3, ..., 12 are inserted into the cavities A, B, C, ..., M.

Example for  
standard system

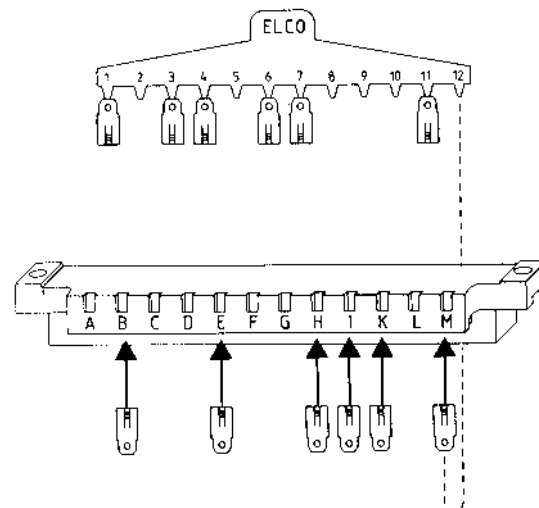
## Instructions for keying:

### 1. Keying of the fixed connector (receptacle for standard system, plug for inverted system)

Choose six cavities into which the keys shall be inserted. Break the related keys individually off the strip and insert them into the chosen cavities.

Picture 3

receptacle

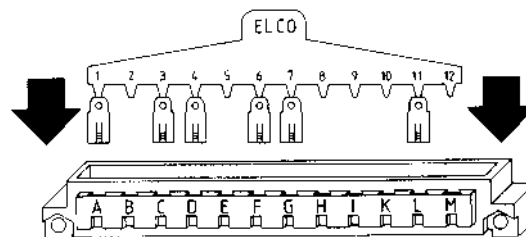


### 2. Keying of the free connector (plug for standard system, receptacle for inverted system)

Insert the balance of the keys remaining attached to the strip into the belonging cavities and break off the strip.

Picture 4

plug



We recommend 6 keys in each side of a pair of connectors. Including the example shown above, 924 different keying possibilities are available.

# Technical Specifications

# ELCO

## Series

**8254 / 8459**

**8457 / 8458**

**8477 / 8478**

Basic Grid	.100 (2,54) X .100 (2,54) - .100 (2,54) X .200 (5,08)
Insertion Force	3.0 oz./ .83 N average per contact pair (20.23/ 90N max. for 96 contacts)
Withdrawal Force	Average per contact pair (.54 oz. / 0,15N min. per contact)
Contact Positions	2 X 16, 2 X 32, 3 X 10, 3 X 16, 3 X 32, 3 X 50, 4 X 32, 4 X 50, 5 X 32
Contact Resistance	20 milliohms max.
Current Rating * (see note)	3 amperes @ 20°C max. on connectors up to 96 contacts. 1 ampere max. on connectors from 100 to 201 contacts.
Insulation Resistance	5,000 megohms min. at 500 VDC
Dielectric Withstanding Voltage	1,000 VAC rms at sea level
Operating Temperature	-65°C to +125°C
Insulator Material	Thermoplastic 94 V-0 UL Rated
Socket Contact Material	Phosphor bronze
Pin Contact Material	Copper tin
Wrap Post Dimension	.024 X .024 (0,6 mm x 0,6 mm)
Push-Out Force of Post in Insulator	3 lbs.

## Series

**8447**

Basic Grid	.200 (5,08) X .200 (5,08)
Insertion Force	4.0 oz./ 1.11 N average per contact pair (9.0 lbs. / 40N max. for 32 contacts)
Withdrawal Force	Average per contact pair (.54 oz. / 0,15N min. per contact)
Contact Positions	2 X 16, 3 X 16
Contact Resistance	15 milliohms max.
Current Rating * (see note)	5.5 amperes @ 20°C max.
Insulation Resistance	5,000 megohms min. at 500 VDC
Dielectric Withstanding Voltage	1,550 VAC rms at sea level
Operating Temperature	-65°C to +125°C
Insulator Material	Polycarbonate (GF)
Pin Contact Material	Copper alloy
Wrap Post Dimension	1,0 mm X 1,0 mm

## Series

**8557 / 8577**

Basic Grid	.100 (2,54) X .100 (2,54) - .100 (2,54) X .200 (5,08)
Insertion Force	3.0 oz./ .83 N average per contact pair (20.23 / 90N max. for 96 contacts)
Withdrawal Force	Average per contact pair (.54 oz. / 0,15N min. per contact)
Contact Positions	3 X 16, 3 X 32, 4 X 32 (inverted receptacle)
Contact Resistance	20 milliohms max.
Current Rating * (see note)	3 amperes @ 20°C max. on connectors up to 96 contacts.
Insulation Resistance	5,000 megohms min. at 500 VDC
Dielectric Withstanding Voltage	1,000 VAC rms at sea level
Operating Temperature	-65°C to +125°C
Insulator Material	LCP
Socket Contact Material	Phosphor bronze
Pin Contact Material	Copper alloy
Wrap Post Dimension	.024 X .024 (0,6 mm x 0,6 mm)
Push-Out Force of Post in Insulator	3 lbs.

\* Current Rating: UL approval allows that DIN connectors up to 96 contacts be rated at 3 amperes. Over 96 pins must be derated to 1.0 ampere maximum. VDE, CSA, and other European standards rate all DIN and DIN type connectors at 1 ampere maximum when they are on a .100 (2,54) X .100 (2,54) grid. (UL file #E27610 Vol. # 1 Section #6.)

## Plating table

<b>Class</b>	M55302 Class I	DIN 41612 Class II	DIN 41612 Class III
<b>Cycle Life</b>	500+ Cycles	400 Cycles	50 Cycles

Shaded variations recommended for standard applications.  
Available through ELCO franchised distributors.

## Military part number cross-reference

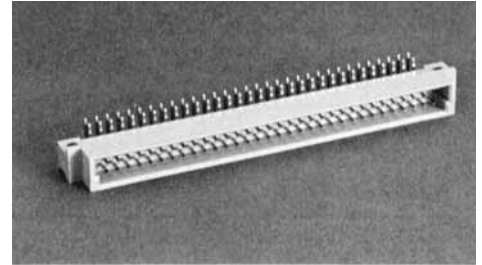
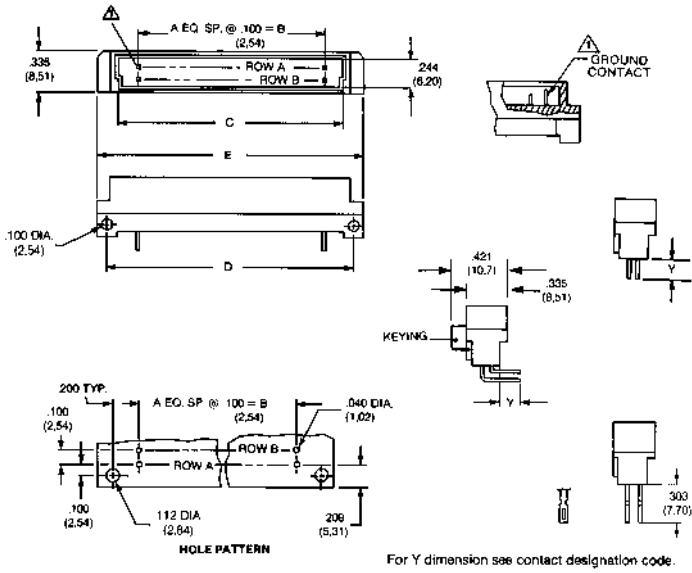
Military Designation	Elco MIL P/N	Commercial Equivalent
M55302/131-01	10-8457-096-002-913	10-8457-096-002-025
M55302/131-02	10-8457-096-002-914	10-8457-096-002-026
M55302/132-01	20-8457-096-002-908	20-8457-096-002-025
M55302/132-02	20-8457-096-005-902	20-8457-096-005-097
M55302/132-03	20-8457-096-006-900	20-8257-096-006-097
M55302/132-04	20-8457-096-002-910	20-8457-096-002-026
M55302/132-05	20-8457-096-005-900	20-8457-096-005-098
M55302/132-06	20-8457-096-006-901	20-8257-096-006-098
M55302/133-01	10-8457-064-002-901	10-8457-064-002-025
M55302/133-02	10-8457-064-002-902	10-8457-064-002-028
M55302/133-03	10-8457-064-002-903	10-8457-064-002-027
M55302/134-01	20-8457-064-002-902	20-8457-064-002-025
M55302/134-02	20-8457-064-005-901	20-8457-064-005-097

Military Designation	Elco MIL P/N	Commercial Equivalent
M55302/134-03	20-8457-064-006-900	20-8257-064-006-097
M55302/134-04	20-8457-064-002-903	20-8457-064-002-028
M55302/134-05	20-8457-064-005-902	20-8457-064-005-100
M55302/134-06	20-8457-064-006-901	20-8257-064-006-100
M55302/134-07	20-8457-064-002-904	20-8457-064-002-027
M55302/134-08	20-8457-064-005-903	20-8457-064-005-099
M55302/134-09	20-8457-064-006-902	20-8257-064-006-099
M55302/157-01	10-8477-096-006-901	10-8477-096-006-097
M55302/157-02	10-8477-096-002-902	10-8477-096-002-025
M55302/157-03	10-8477-096-006-903	10-8477-096-006-098
M55302/157-04	10-8477-096-002-904	10-8477-096-002-026
M55302/158-01	20-8477-096-002-901	20-8477-096-002-025
M55302/158-02	20-8477-096-002-902	20-8477-096-002-026

# Style B & 1/2 B Header

8457

Standard  
2-Row



**ORDERING CODE** Typical Example **10** **8457** **064** **002** **025**

**PREFIX**  
 10-PIN WITHOUT KEYING    16-PIN WITH BOARD RETENTION CLIP FOR .062" (1.6mm) BOARD WITHOUT KEYING  
 12-PIN WITH KEYING        17-PIN WITH BOARD RETENTION CLIP FOR .062" (1.6mm) BOARD WITH KEYING

**SERIES**  
 Standard DIN, Style B & 1/2 B

**NUMBER OF CONTACT CAVITY POSITIONS**

NO. CONTACT POSITIONS	CONTACT ROWS	A	B	C	D	E
032	2 (2 x 16)	15	1.500 (38,10)	1.754 (44,55)	1.900 (48,26)	2.100 (53,34)
064	2 (2 x 32)	31	3.100 (78,74)	3.354 (85,19)	3.500 (88,90)	3.700 (93,98)

**CONTACT DESIGNATION CODE**

CODE NO.	DESCRIPTION	TERMINAL LENGTH = Y
001	P.C. contact sq. terminal	.134 (3,40)
002	P.C. contact right-angled, short sq. terminal	.118 (3,00)
102	P.C. contact right-angled, short sq. terminal	.118 (3,00)
003	Straight wire wrapping sq. terminal	.512 (13,0)

CODE NO.	DESCRIPTION	TERMINAL LENGTH = Y
004	P.C. contact right-angled for 2 wire wraps. sq. terminal	.445 (11,30)
006	Solder Hole	.303 (7,70)
007	Solder Loop	.252 (6,40)
008	P.C. contact right-angled, short. sq. terminal	.090 (2,3)

**VARIATION CODE**

Class	Gold All Over		Gold Contact Area, Tin/Lead Terminal	
	DIN 41612 Class II	DIN 41612 Class III	DIN 41612 Class II	DIN 41612 Class III
Cycle Life	400 Cycles	50 Cycles	400 Cycles	50 Cycles
Variation Code Numbers				
097	073	025	001	Fully loaded .100 (2,54) grid
099	075	027	003	Row A Fully loaded .100 (2,54) grid
Contact Loading Positions				

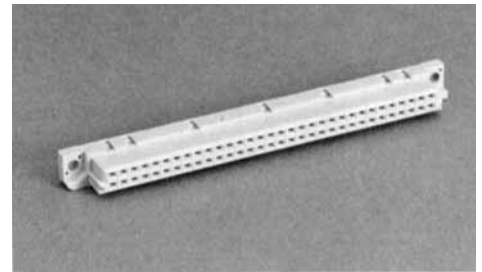
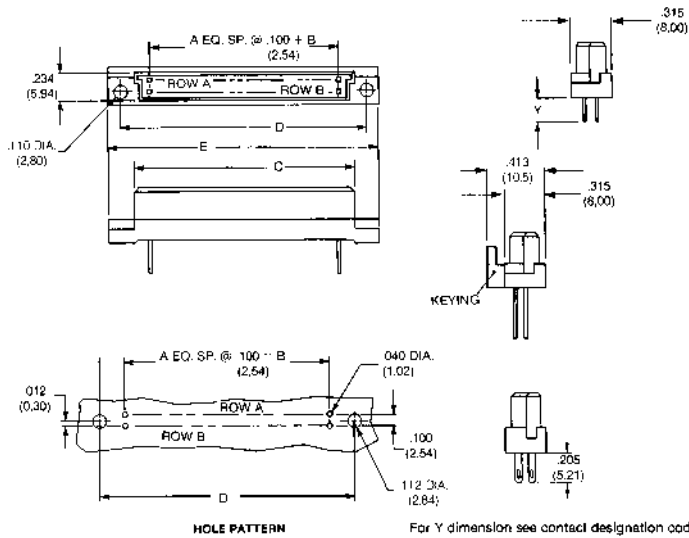
NOTE: For alternate loading and plating, please contact factory.

Ground contact row a, first & last position. Shaded variations recommended for standard applications. Available through ELCO franchised distributors.

# Style B & 1/2 B Receptacle

# 8457

## Standard 2-Row



### ORDERING CODE Typical Example

**20** **8457** **064** **001** **025**

### PREFIX

- 20-SOCKET WITHOUT KEYING
- 22-SOCKET WITH KEYING
- 24-SOCKET WITH BOARD RETENTION CLIP FOR .125" (3.2mm) BOARD WITHOUT KEYING
- 25-SOCKET WITH BOARD RETENTION CLIP FOR .125" (3.2mm) BOARD WITH KEYING
- 26-SOCKET WITH BOARD RETENTION CLIP FOR .062" (1.6mm) BOARD WITHOUT KEYING
- 27-SOCKET WITH BOARD RETENTION CLIP FOR .062" (1.6mm) BOARD WITH KEYING

### SERIES

Standard DIN, Style B & 1/2 B

### NUMBER OF CONTACT CAVITY POSITIONS

NO. CONTACT POSITIONS	CONTACT ROWS	A	B	C	D	E
032	2 (2 x 16)	15	1.500 (38,10)	1.744 (44,30)	1.968 (49,99)	2.162 (54,91)
064	2 (2 x 32)	31	3.100 (78,74)	3.343 (84,91)	3.543 (89,99)	3.736 (94,89)

### CONTACT DESIGNATION CODE

CODE NO.		DESCRIPTION	TERMINAL LENGTH = Y
001		P.C. contact, square terminal	.177 (4,50)
002			.114 (2,90)
003		P.C. contact, .012 (0,30) X .031 (0,79)	.177 (4,50)
004			.114 (2,90)
005		Straight wire wrap, square terminal	.512 (13,00)
006			Wire Wrap (8257 Series) Consult Factory

CODE NO.		DESCRIPTION	TERMINAL LENGTH = Y
009		Solder Eyelet (8257 Series) Consult Factory	.205 (5,2)
011			P.C. contact, square terminal
012		Straight wire wrap, square terminal	.764 (19,4)
013			P.C. contact, right-angle

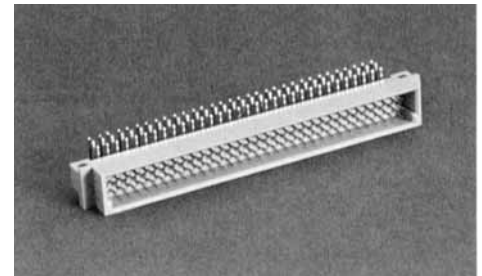
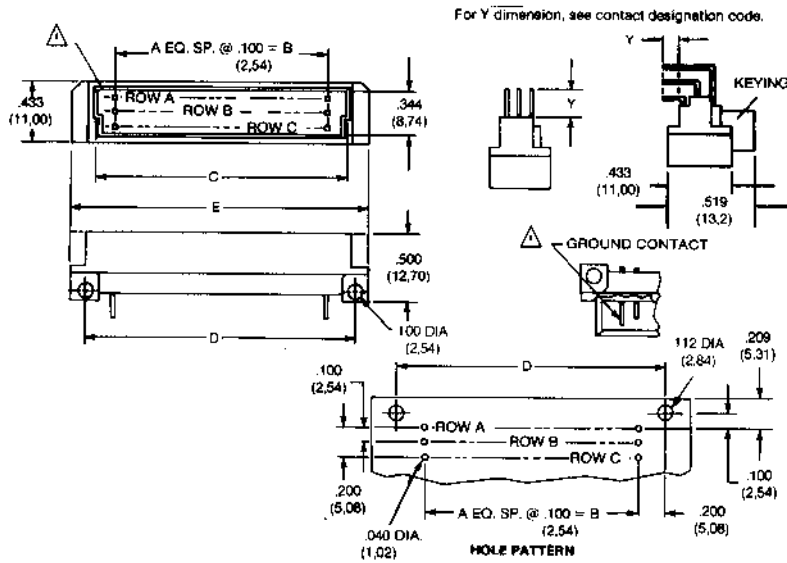
### VARIATION CODE

	Gold All Over		Gold Contact Area, Tin/Lead Terminal		
Class	DIN 41612 Class II	DIN 41612 Class III	DIN 41612 Class II	DIN 41612 Class III	
Cycle Life	400 Cycles	50 Cycles	400 Cycles	50 Cycles	
	Variation Code Numbers				Contact Loading Positions
	097	073	025	001	Fully loaded .100 (2,54) grid
	099	075	027	003	Row A Fully loaded .100 (2,54) grid

NOTE: For alternate loading and plating, please contact factory.  
Shaded variations recommended for standard applications.  
Available through ELCO franchised distributors.

# Expanded Style C, 1/2 C & 1/3 C Header 8457

Standard  
3-Row/4-Row/5-Row



## ORDERING CODE Typical Example

10

8457

096

002

025

## PREFIX

10-PIN WITHOUT KEYING 16-PIN WITH BOARD RETENTION CLIP FOR .062" (1.6mm) BOARD WITHOUT KEYING  
12-PIN WITH KEYING 17-PIN WITH BOARD RETENTION CLIP FOR .062" (1.6mm) BOARD WITH KEYING

## SERIES

## NUMBER OF CONTACT CAVITY POSITIONS

Standard DIN, Style C, 1/2 C, & 1/3 C

NO. CONTACT POSITIONS	CONTACT ROWS	A	B	C	D	E
030	3 (3 x 10)	9	.900 (22,86)	1.158 (29,41)	1.300 (33,02)	1.497 (38,02)
048	3 (3 x 16)	15	1.500 (38,10)	1.760 (44,70)	1.900 (48,26)	2.122 (53,90)
096	3 (3 x 32)	31	3.100 (78,74)	3.358 (85,29)	3.500 (88,90)	3.697 (93,90)

# POS.	CTC ROWS	A	B	C	D	E
128	4 (4 x 32)	31	3.100 (78,74)	3.358 (85,29)	3.500 (88,90)	3.697 (93,90)
160	5 (5 x 32)	31	3.100 (78,74)	3.358 (85,29)	3.500 (88,90)	3.697 (93,90)

## CONTACT DESIGNATION CODE

CODE NO.	DESCRIPTION	TERMINAL LENGTH = Y
001	sq. terminal P.C. contact	.134 (3,40)
002	P.C. contact, right-angled, short sq. terminal	.118 (3,00)
102		
003	Straight wire wrapping sq. terminal	.512 (13,00)

CODE NO.	DESCRIPTION	TERMINAL LENGTH = Y
004	P.C. contact right-angled long for 2 wire wrap levels sq. terminal	.445 (11,30)
006	Solder Hole	Row A & C = .303 (7,70) Row B = .409 (10,4)
007	Solder Loop	Row A & C = .252 (6,40) Row B = .358 (9,10)
008	P.C. contact right-angled, short. sq. terminal	.090 (2,3)

## VARIATION CODE

Class	Gold All Over		Gold Contact Area, Tin/Lead Terminal	
	DIN 41612 Class II	DIN 41612 Class III	DIN 41612 Class II	DIN 41612 Class III
Cycle Life	400 Cycles	50 Cycles	400 Cycles	50 Cycles
Variation Code Numbers				Contact Loading Positions
097	073	025	001	Fully loaded .100 (2,54) grid
098	074	026	002	Row A & C Fully loaded .100 (2,54) x .200 (5,08) grid

NOTE: For alternate loading and plating, please contact factory.

⚠ Ground contact row a, first & last position.

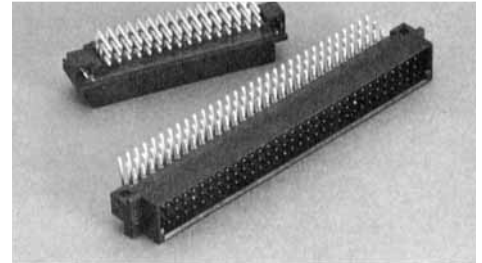
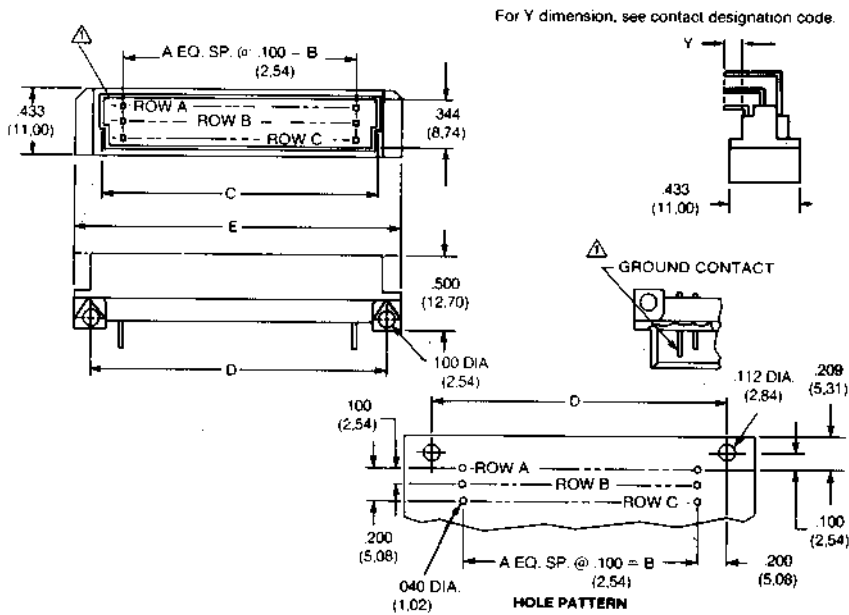
⚠ Not available with keying. Shaded variations recommended for standard applications. Available through ELCO franchised distributors.



# Style C & 1/2 C Header

# 8557

High Temperature  
Standard  
3-Row



## ORDERING CODE Typical Example

**10 8557 048 002 025**

### PREFIX

10-PIN WITHOUT KEYING  
16-PIN WITH BOARD RETENTION CLIPS

### SERIES

Standard DIN, Style C, 1/2 C

### NUMBER OF CONTACT CAVITY POSITIONS

NO. CONTACT POSITIONS	CONTACT ROWS	A	B	C	D	E
048	3 (3 x 16)	15	1.500 (38,10)	1.760 (44,70)	1.900 (48,26)	2.122 (53,90)
096	3 (3 x 32)	31	3.100 (78,74)	3.358 (85,29)	3.500 (88,90)	3.697 (93,90)

### CONTACT DESIGNATION CODE

CODE NO.	DESCRIPTION	TERMINAL LENGTH = Y
002	PC contact, right-angled,	.118 (3,00)
102	short sq. terminal	

### VARIATION CODE

Class	Gold All Over		Gold Contact Area, Tin/Lead Terminal	
	DIN 41612 Class II	DIN 41612 Class III	DIN 41612 Class II	DIN 41612 Class III
Cycle Life	400 Cycles	50 Cycles	400 Cycles	50 Cycles
Variation Code Numbers			Contact Loading Positions	
	097	073	025	001
	Fully loaded .100 (2,54) grid			
	098	074	026	002
	Row A & C Fully loaded .100 (2,54) x .200 (5,08) grid			

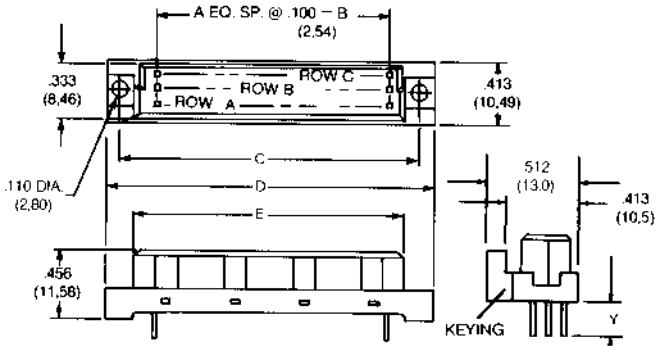
△ Ground contact row a, first & last position. Shaded variations recommended for standard applications. Available through ELCO franchised distributors.

- withstands temperatures of 240°C to 250°C for up to 15 seconds
- ideal for IR reflow or convection oven processing (up to 20 seconds pre & post processing heat)
- eliminates need for secondary soldering or product shielding/masking to resist heat

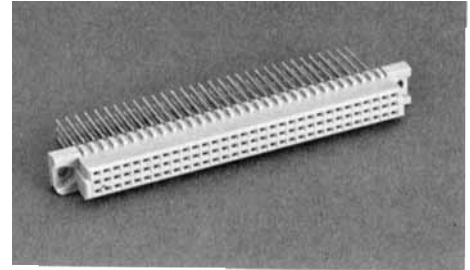
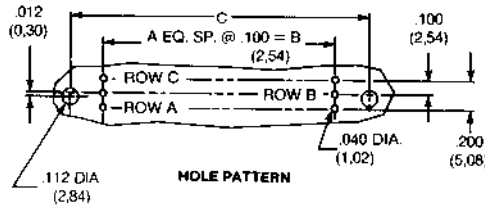
# Style C, 1/2 C & 1/3 C Receptacle

# 8457

## Standard 3-Row



For Y dimension see contact designation code.



### ORDERING CODE Typical Example

20

8457

048

001

025

### PREFIX

- 20-SOCKET WITHOUT KEYING
- 22-SOCKET WITH KEYING
- 24-SOCKET WITH BOARD RETENTION CLIP FOR .125" (3.2mm) BOARD WITHOUT KEYING
- 25-SOCKET WITH BOARD RETENTION CLIP FOR .125" (3.2mm) BOARD WITH KEYING
- 26-SOCKET WITH BOARD RETENTION CLIP FOR .062" (1.6mm) BOARD WITHOUT KEYING
- 27-SOCKET WITH BOARD RETENTION CLIP FOR .062" (1.6mm) BOARD WITH KEYING

### SERIES

Standard DIN, Style C, 1/2 C & 1/3 C

### NUMBER OF CONTACT CAVITY POSITIONS

NO. CONTACT POSITIONS	CONTACT ROWS	A	B	C	D	E
030	3 (3 x 10)	.900 (22,86)	1.368 (34,75)	1.563 (39,70)	1.144 (29,06)	
048	3 (3 x 16)	1.500 (38,10)	1.969 (50,01)	2.161 (54,89)	1.744 (44,30)	
096	3 (3 x 32)	3.100 (78,74)	3.543 (89,99)	3.736 (94,89)	3.343 (84,91)	

### CONTACT DESIGNATION CODE

CODE NO.	DESCRIPTION	TERMINAL LENGTH = Y	CODE NO.	DESCRIPTION	TERMINAL LENGTH = Y
001	PC. contact, square terminal	.177 (4,50)	009	Solder Eyelet (8257 Series) Consult Factory	A=.205 (5,2) B=.303 (7,7) C=.205 (5,2)
002	PC. contact, square terminal	.114 (2,90)	010	Straight wire wrap square terminal	.274 (7,0)
003	PC. contact .012 (0,30) X .031 (0,79)	.177 (4,50)	011	PC. contact square terminal	.137 (3,5)
004	PC. contact .012 (0,30) X .031 (0,79)	.114 (2,90)	012	Straight wire wrap square terminal	.764 (19,4)
005	Straight wire wrap, square terminal	.512 (13,00)	013	PC. contact right-angle	.177 (4,5)
006	Wire Wrap (8257 Series) Consult Factory	.677 (17,20)			

### VARIATION CODE

Class	Gold All Over				Gold Contact Area, Tin/Lead Terminal	
	DIN 41612 Class II	DIN 41612 Class III	DIN 41612 Class II	DIN 41612 Class III		
Cycle Life	400 Cycles	50 Cycles	400 Cycles	50 Cycles		
Variation Code Numbers				Contact Loading Positions		
	097	073	025	001	Fully loaded .100 (2,54) grid	
	098	074	026	002	Row A & C Fully loaded .100 (2,54) x .200 (5,08) grid	

NOTE: For alternate loading and plating, please contact factory.

⚠ Not available with keying. Shaded variations recommended for standard applications. Available through ELCO franchised distributors.