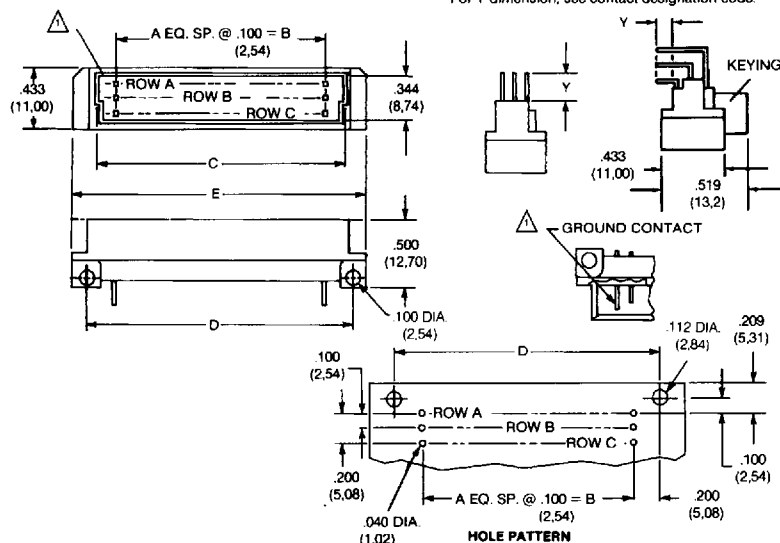
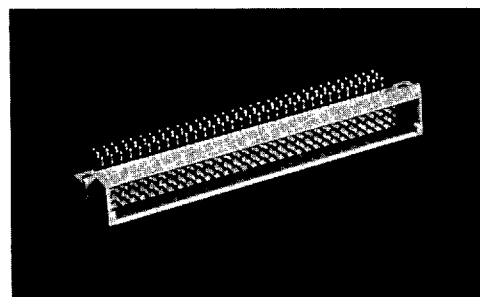


# Expanded Style C, 1/2 C & 1/3 C Header 8457

For Y dimension, see contact designation code.



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



### ORDERING CODE Typical Example

10

8457

096

002

025

#### PREFIX

10-PIN WITHOUT KEYING  
12-PIN WITH KEYING  
16-PIN WITH BOARD RETENTION CLIP FOR .062" (1.6mm) BOARD WITHOUT 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<br>(22.86)   | 1.158<br>(29.41) | 1.300<br>(33.02) | 1.497<br>(38.02) |
| 048                   | 3 (3 x 16)   | 15 | 1.500<br>(38.10) | 1.760<br>(44.70) | 1.900<br>(48.26) | 2.122<br>(53.90) |
| 096                   | 3 (3 x 32)   | 31 | 3.100<br>(78.74) | 3.358<br>(85.29) | 3.500<br>(88.90) | 3.697<br>(93.90) |

| # POS. | CTC ROWS | A               | B                | C                | D                | E                |
|--------|----------|-----------------|------------------|------------------|------------------|------------------|
| 150    | 3 (3X50) | 49              | 4.900<br>(125.5) | 5.154<br>(130.9) | 5.300<br>(134.6) | 4.300<br>(109.7) |
| 128    | 4 (4X32) | Consult Factory |                  |                  |                  |                  |
| 200    | 4 (4X50) | Consult Factory |                  |                  |                  |                  |
| 160    | 5 (5X32) | Consult Factory |                  |                  |                  |                  |

#### CONTACT DESIGNATION CODE

| CODE NO. |  | DESCRIPTION                                    | TERMINAL LENGTH = Y |
|----------|--|------------------------------------------------|---------------------|
| 001      |  | sq. terminal P.C. contact                      | .134<br>(3.40)      |
| 002      |  | P.C. contact, right angled, short sq. terminal | .118<br>(3.00)      |
| △ 102    |  |                                                |                     |
| 003      |  | Straight wire wrapping sq. terminal            | .512<br>(13.00)     |

| CODE NO. |  | DESCRIPTION                                                        | TERMINAL LENGTH = Y                            |
|----------|--|--------------------------------------------------------------------|------------------------------------------------|
| 004      |  | P.C. contact right angled long for 2 wire wrap levels sq. terminal | .445<br>(11.30)                                |
| 006      |  | Solder Hole                                                        | Row A & C = .303 (7.70)<br>Row B = .409 (10.4) |
| 007      |  | Solder Loop                                                        | Row A & C = .252 (6.40)<br>Row B = .358 (9.10) |
| 008      |  | P.C. contact right angled, short sq. terminal                      | .090<br>(2.3)                                  |

#### 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                      |
|            | 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.

# 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 polyester (GF), 94 V-O, 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.                                                                                                       |
| Contact Plating                     | Gold over nickel                                                                                             |

## 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                                                                |
| Contact Plating                 | Gold over nickel                                                               |

## 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.                                                                     |
| Contact Plating                     | Gold over nickel                                                           |

\* 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.)

# Technical Specifications

**ELCO**

## Plating table

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

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

## Military part number cross-reference

| Military Designation | Elco MIL P/N        |
|----------------------|---------------------|
| M55302/131-01        | 10-8457-096-002-913 |
| M55302/131-02        | 10-8457-096-002-914 |
| M55302/132-01        | 20-8457-096-002-908 |
| M55302/132-02        | 20-8457-096-005-902 |
| M55302/132-03        | 20-8457-096-006-900 |
| M55302/132-04        | 20-8457-096-002-910 |
| M55302/132-05        | 20-8457-096-005-900 |
| M55302/132-06        | 20-8457-096-006-901 |
| M55302/133-01        | 10-8457-064-002-901 |
| M55302/133-02        | 10-8457-064-002-902 |
| M55302/133-03        | 10-8457-064-002-903 |
| M55302/134-01        | 20-8457-064-002-902 |
| M55302/134-02        | 20-8457-064-005-901 |

| Military Designation | Elco MIL P/N        |
|----------------------|---------------------|
| M55302/134-03        | 20-8457-064-006-900 |
| M55302/134-04        | 20-8457-064-002-903 |
| M55302/134-05        | 20-8457-064-005-902 |
| M55302/134-06        | 20-8457-064-006-901 |
| M55302/134-07        | 20-8457-064-002-904 |
| M55302/134-08        | 20-8457-064-005-903 |
| M55302/134-09        | 20-8457-064-006-902 |
| M55302/157-01        | 10-8477-096-006-901 |
| M55302/157-02        | 10-8477-096-002-902 |
| M55302/157-03        | 10-8477-096-006-903 |
| M55302/157-04        | 10-8477-096-002-904 |
| M55302/158-01        | 20-8477-096-002-901 |
| M55302/158-02        | 20-8477-096-002-902 |