

## Compact D-Sub Backshells



### INTRODUCTION

Carlisle Interconnect Technologies' (CarlisleIT) lightweight series D-Sub Backshells are designed to minimize weight and maximize internal space and EMI shielding. Our D-Sub Backshells are an ideal solution for high-end commercial and aviation cables where weight and/or EMI shielding are critical. The lightweight series D-Sub Backshells also feature a number of unique characteristics that improve the ease of assembly and overall system stability.

### KEY CHARACTERISTICS

- » Tapped body style
- » Accommodates conventional and moisture-proof MIL-STD-24308 D-Sub connectors
- » Designed for ease of manufacturing and rework in the field
- » High-precision manufacturing results in a minimal air gap
- » Very effective EMI shielding
- » RoHS and ELV compliant

### FEATURES

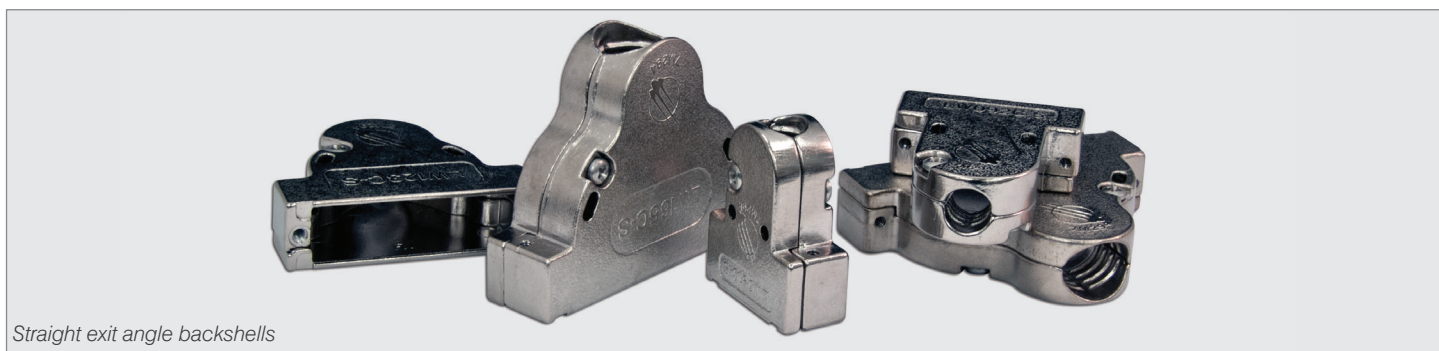
- » Straight, 45° and 90° exit
- » 60% lighter than comparable industry standard products
- » Compact and efficient design maximizes internal space
- » Front panel mount capability
- » Slots for mounting stability

### BENEFITS

- » Special mounting features that maximize cable strain relief strength. This subsequently prevents potential damage to individual wires and electrical contacts.
- » Readily available engineering support for shield termination methods that optimize the mechanical and electrical system performances.
- » Custom designs are available to suit special application requirements such as tight space limitations or bending radii.

# Compact D-Sub Backshells

## STRAIGHT EXIT ANGLE BACKSHELL



Straight exit angle backshells

### Features

- » Straight cable exit
- » Unique front-panel mount feature
- » Slots for 4-40 screw or tie strap to provide more mounting stability

### Ideal Applications

- » Aerospace video and Ethernet
- » EMI protection
- » Weight sensitive

### Kit Contents

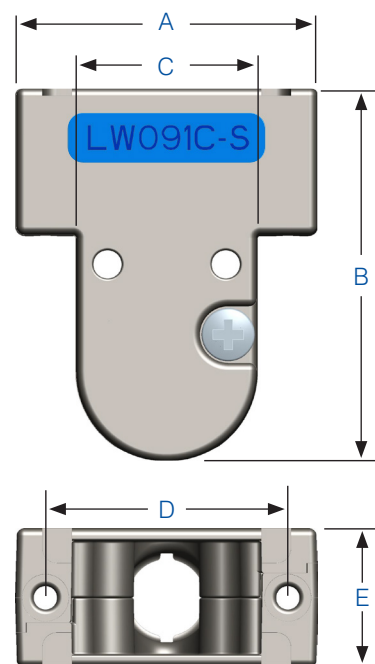
- » 2 shell halves
- » 2 screws (MS51957)

### Standard Material

- » Shell - aluminum alloy with electro-less nickel plating
- » 4-40 pan head screws - stainless steel

### Optional Material

- » Zinc alloy or metalized plastic
- » Additional plating upon request



| Shell Size | Dimensions |        |        |        |       | Cable DIA<br>(Min-Max) | Weight | Material          | P/N        |
|------------|------------|--------|--------|--------|-------|------------------------|--------|-------------------|------------|
|            | A          | B      | C      | D      | E     |                        |        |                   |            |
| 1/E        | 1.23"      | 1.5"   | 0.74"  | 0.984" | 0.56" | 0.15" - 0.35"          | 18 g   | Die-Cast Aluminum | LW091C-S   |
|            |            |        |        |        |       |                        | 13.5 g | Composite         | LW091P-S   |
|            | 1.23"      | 1.247" | 0.75"  | 0.984" | 0.58" | 0.15" - 0.35"          | 11 g   | Die-Cast Aluminum | LW091C-S-C |
| 2/A        | 1.55"      | 1.8"   | 1"     | 1.312" | 0.58" | 0.15" - 0.35"          | 25 g   | Die-Cast Aluminum | LW092C-S   |
|            |            |        |        |        |       |                        | 16 g   | Composite         | LW092P-S   |
|            | 1.55       | 1.294" | 1"     | 1.312" | 0.51" | 0.15" - 0.35"          | 13.5 g | Die-Cast Aluminum | LW092C-S-C |
| 3/B        | 2.1"       | 1.8"   | 1.475" | 1.852" | 0.58" | 0.2" - 0.48"           | 28.5 g | Die-Cast Aluminum | LW123C-S   |
|            |            |        |        |        |       |                        | 18 g   | Composite         | LW123P-S   |
|            | 2.1"       | 1.279" | 1.472" | 1.852" | 0.58" | 0.4" - 0.65"           | 21 g   | Die-Cast Aluminum | LW163C-S-C |
| 4/C        | 2.75"      | 2"     | 2.155" | 2.5"   | 0.58" | 0.3" - 0.58"           | 36 g   | Die-Cast Aluminum | LW154C-S   |
| 5/D        | 2.65"      | 2"     | 2.085" | 2.406" | 0.68" | 0.4" - 0.65"           | 38 g   | Die-Cast Aluminum | LW165C-S   |

#### Notes:

1. The parts shown in the above table are standard items. Other strain relief diameters can be available upon request.
2. Parts are packaged unassembled.

# Compact D-Sub Backshells

## 45° EXIT ANGLE BACKSHELL



### Features

- » 45° cable exit
- » Unique front-panel mount feature
- » Slots for 4-40 screw or tie strap to provide more mounting stability

### Ideal Applications

- » Aerospace video and Ethernet
- » EMI protection
- » Weight sensitive

### Kit Contents

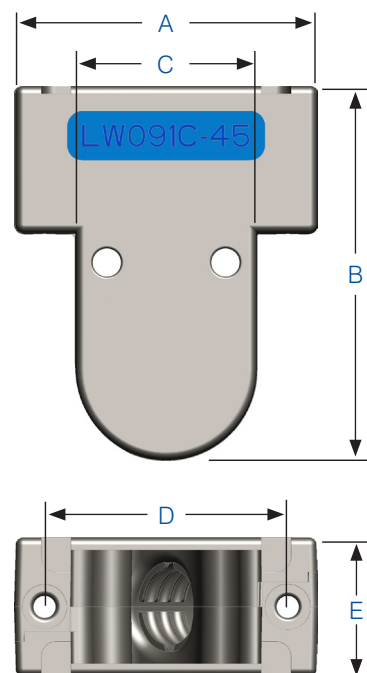
- » 2 shell halves
- » 2 screws (MS51957)

### Standard Material

- » Shell - aluminum alloy with electro-less nickel plating
- » 4-40 pan head screws - stainless steel

### Optional Material

- » Zinc alloy or metalized plastic
- » Additional plating upon request



| Shell Size | Dimensions |      |        |        |       | Cable DIA<br>(Min-Max) | Weight | Material          | P/N       |
|------------|------------|------|--------|--------|-------|------------------------|--------|-------------------|-----------|
|            | A          | B    | C      | D      | E     |                        |        |                   |           |
| 1/E        | 1.23"      | 1.5" | 0.75"  | 0.984" | 0.58" | 0.15" - 0.35"          | 17.5 g | Die-Cast Aluminum | LW091C-45 |
|            |            |      |        |        |       |                        | 12.5 g | Composite         | LW091P-45 |
| 2/A        | 1.56"      | 1.5" | 1"     | 1.312" | 0.58" | 0.15" - 0.35"          | 15 g   | Composite         | LW092P-45 |
|            |            |      |        |        |       |                        | 25 g   | Die-Cast Aluminum | LW122C-45 |
| 3/B        | 2.1"       | 1.8" | 1.475" | 1.852" | 0.58" | 0.2" - 0.48"           | 28.5 g | Die-Cast Aluminum | LW123C-45 |
|            |            |      |        |        |       |                        | 18 g   | Composite         | LW123P-45 |
| 4/C        | 2.75"      | 2"   | 2.155" | 2.5"   | 0.58" | 0.3" - 0.58"           | 35 g   | Die-Cast Aluminum | LW154C-45 |
| 5/D        | 2.65"      | 2"   | 2.085" | 2.406" | 0.69" | 0.4" - 0.65"           | 38 g   | Die-Cast Aluminum | LW165C-45 |

#### Notes:

1. The parts shown in the above table are standard items. Other strain relief diameters can be available upon request.
2. Parts are packaged unassembled.

# Compact D-Sub Backshells

## 90° EXIT ANGLE BACKSHELL



### Features

- » 90° cable exit

### Ideal Applications

- » Aerospace video and Ethernet
- » EMI protection
- » Weight sensitive

### Kit Contents

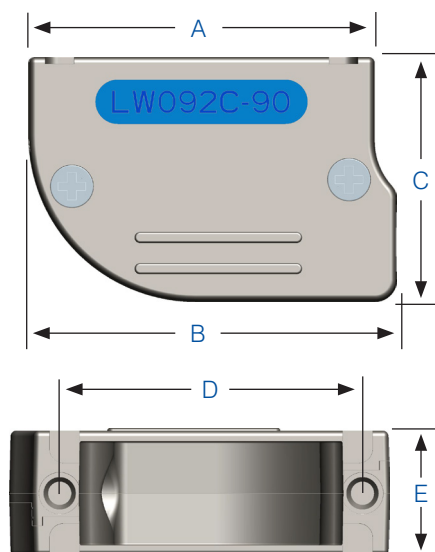
- » 2 shell halves
- » 2 screws

### Standard Material

- » Shell - cast aluminum alloy with electro-less nickel plating
- » Flat head screws - stainless steel

### Optional Material

- » Zinc alloy or metalized plastic
- » Additional plating upon request



| Shell Size | Dimensions |       |       |        |       | Cable DIA<br>(Min-Max) | Weight | Material          | P/N        |
|------------|------------|-------|-------|--------|-------|------------------------|--------|-------------------|------------|
|            | A          | B     | C     | D      | E     |                        |        |                   |            |
| 1/E        | 1.23"      | 1.33" | 0.95" | 0.984" | 0.52" | 0.15" - 0.35"          | 13.5 g | Composite         | LW091P-90  |
| 2/A        | 1.55"      | 1.65" | 1.1"  | 1.312" | 0.54" | 0.15" - 0.35"          | 15 g   | Die-Cast Aluminum | LW092C-90  |
|            | 1.55"      | 1.55" | 1.1"  | 1.312" | 0.56" | 0.2" - 0.48"           | 10.5 g | Composite         | LW122P-60  |
|            | 1.55"      | 1.55" | 1.1"  | 1.312" | 0.54" | 0.2" - 0.48"           | 14 g   | Composite         | LW122P-90  |
| 3/B        | 2.1"       | 2.2"  | 1.2"  | 1.852" | 0.56" | 0.2" - 0.48"           | 18 g   | Die-Cast Aluminum | LW123C-90  |
|            |            |       |       |        |       |                        | 16 g   | Composite         | LW123P-90  |
| 4/C        | 2.75"      | 2.84" | 1.5"  | 2.5"   | 0.54" | 0.4" - 0.65"           | 32 g   | Die-Cast Aluminum | LW164C-90  |
| 5/D        | 2.65"      | 2.75" | 1.5"  | 2.406" | 0.68" | 0.4" - 0.65"           | 34 g   | Die-Cast Aluminum | LW165C-90* |

\*Design in development only.

Notes:

1. The parts shown in the above table are standard items unless otherwise noted. Other strain relief diameters are available upon request.
2. Parts are packaged unassembled.



See CarlisleIT's line of Backshells at:  
[CarlisleIT.com/products/connectors-accessories/backshells](http://CarlisleIT.com/products/connectors-accessories/backshells)

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