

# Cannon Speedy D

## IDC contacts

Speedy D connectors terminate ribbon cables without stripping and without splicing. They are intermateable with all D Subminiature types offered on the market. The extremely low profile is another typical feature of the Speedy D.



## Technical Data

### Materials

|                  |  |
|------------------|--|
| Shell            | Steel, with pure tin matt                          |
| Insulator        | High quality thermoplast, flame retardant, UL94V-0 |
| Contacts         | Copper alloy                                       |
| Contact area     | gold-plated over nickel                            |
| Termination area | pure tin, matt                                     |

### Mechanical Features

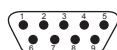
|   |  |
|---|--|
| Coupling                                | Friction, accessories  |
| Polarizing                              | Keystone shape shell   |
| Termination                             | IDC  |
| Wire sizes                              | AWG 26 (0,13mm <sup>2</sup> ), AWG 28 (0,08mm <sup>2</sup> ) solid or stranded |
| Ribbon cable                            | Conductor spacing 1,27mm   |
| Temperature rating to DIN IEC 68 part 1 | -55/125°C  |

### Electrical Data

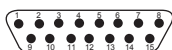
|                       |  |
|-----------------------|--|
| Current rating        | 1.5 A at 25°C, 1 A at 70°C ambient temperature |
| Contact resistance    | 15 mOhm (milli Ohm)                            |
| Voltage rating        | 780 VAC  |
| Insulation resistance | 5 x 10 <sup>3</sup> MOhm (Mega Ohm)            |
| Air/creepage paths    | minimum 0,9mm                                  |

### Standard Contact Arrangements

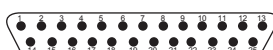
Contact size 20  
Face view pin insert



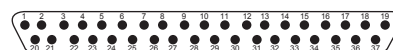
**E**  
9



**A**  
15



**B**  
25



**C**  
37

Shell size  
No. of contacts



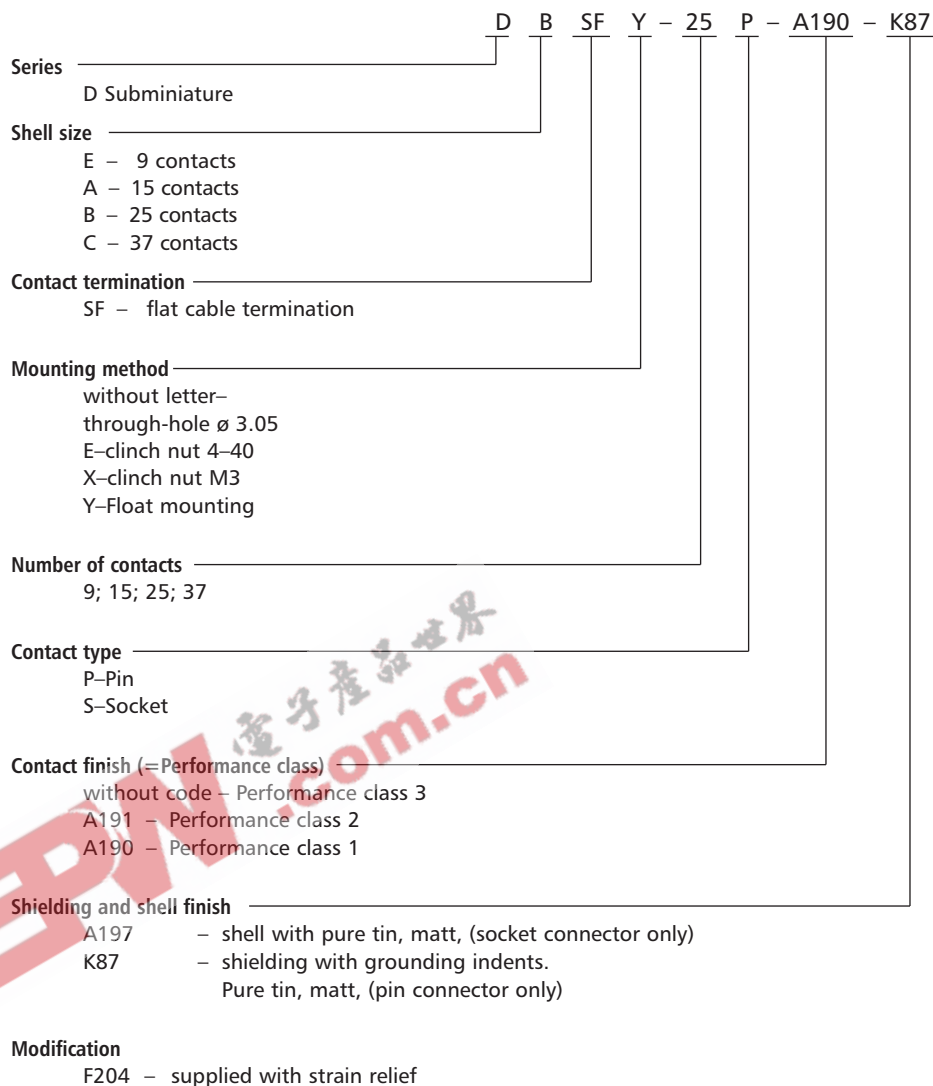
Dimensions shown in mm  
Specifications and dimensions subject to change.

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# Cannon Speedy D



## RoHS Compliant Ordering Key



### Contact finishes/Performance class

without code – performance class 3 (50 mating cycles) is standard version of Speedy D

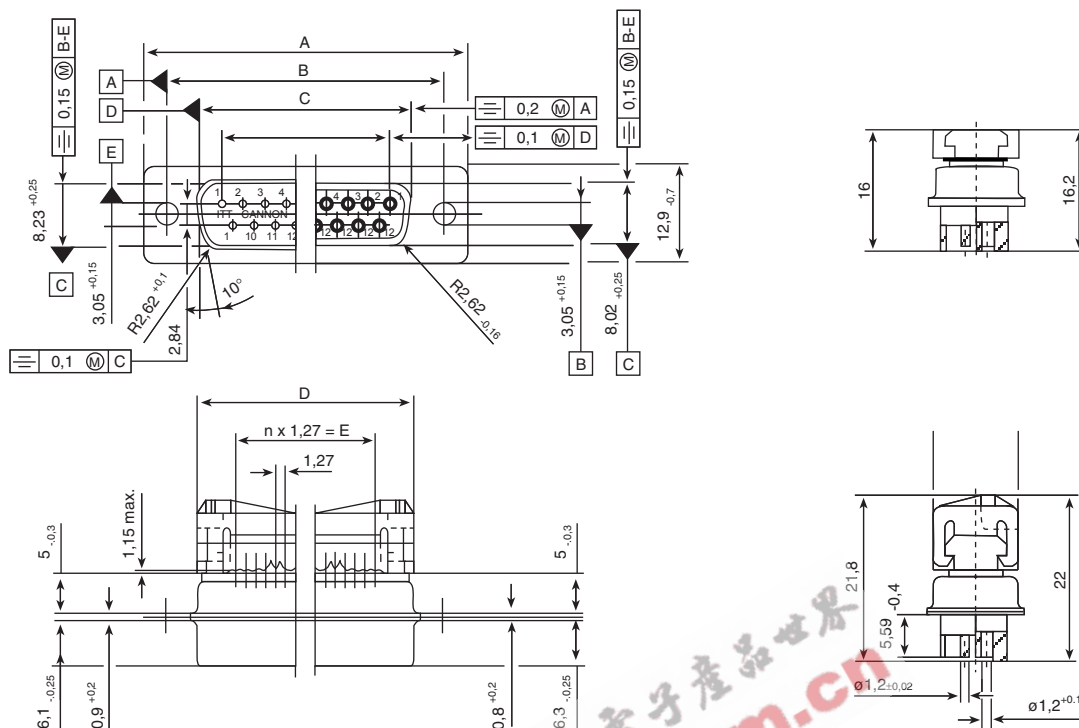
A191 – performance class 2 (200 mating cycles)

A190 – performance class 1 (500 mating cycles)

# Cannon Speedy D



Pin connector / Socket connector

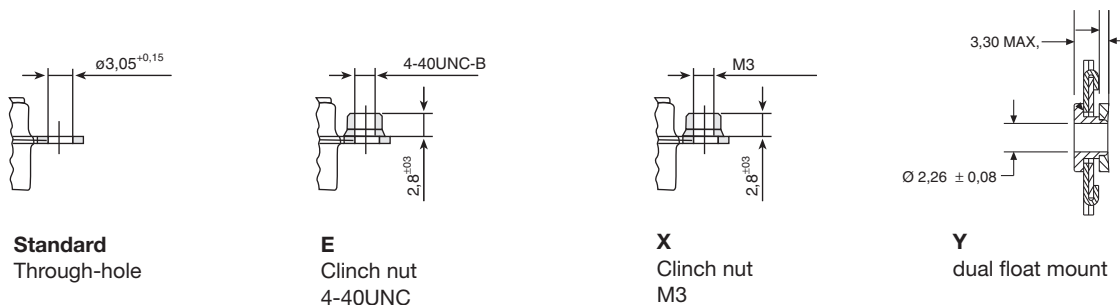


## Dimensions

| No. of contacts |   | A<br>±0,3 | B<br>±0,3 | C<br>±0,15 | D    | E                 |
|-----------------|---|-----------|-----------|------------|------|-------------------|
| 9               | P | 30,8      | 25,0      | 16,8       | 19,4 | 8 x 1,27 = 10,18  |
|                 | S | 30,8      | 25,0      | 16,25      | 19,4 |                   |
| 15              | P | 39,1      | 33,3      | 25,1       | 27,7 | 14 x 1,27 = 17,78 |
|                 | S | 39,1      | 33,3      | 24,55      | 27,7 |                   |
| 25              | P | 53,0      | 47,0      | 38,85      | 41,4 | 24 x 1,27 = 30,48 |
|                 | S | 53,0      | 47,0      | 38,3       | 41,4 |                   |
| 37              | P | 69,3      | 63,5      | 55,3       | 57,9 | 36 x 1,27 = 45,72 |
|                 | S | 69,3      | 63,5      | 54,75      | 57,9 |                   |

P-Pin  
S-Socket

## Mounting methods



Dimensions shown in mm  
Specifications and dimensions subject to change.  
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# Cannon Speedy D



## IDC contacts

### Receptacle

| No. of contacts | Through-hole |        | Float mount |        | Clinch nut 4-40* |        |
|-----------------|--------------|--------|-------------|--------|------------------|--------|
| 9               | DESF- 9      | S-A197 | DESFY- 9    | S-A197 | DESFE- 9         | S-A197 |
| 15              | DASF-15      | S-A197 | DASFY-15    | S-A197 | DASFE-15         | S-A197 |
| 25              | DBSF-25      | S-A197 | DBSFY-25    | S-A197 | DBSFE-25         | S-A197 |
| 37              | DCSF-37      | S-1A97 | DCSFY-37    | S-A197 | DCSFE-37         | S-A197 |

or metric thread replace E by X

### Plugs

(pin connector only)

| No. of contacts | with grounding indents | Float mount   | Clinch nut 4-40* |
|-----------------|------------------------|---------------|------------------|
| 9               | DESF- 9P-K87           | DESFY- 9P-K87 | DESFE-9P-K87     |
| 15              | DASF-15P-K87           | DASFY-15P-K87 | DASFE-15P-K87    |
| 25              | DBSF-25P-K87           | DBSFY-25P-K87 | DBSFE-25P-K87    |
| 37              | DCSF-37P-K87           | DCSFY-37P-K87 | DCSFE-37P-K87    |

or metric thread replace E by X

### Performance class

Performance class 1: A190 into order ref.

Performance class 2: A191 into order ref.

e.g. DESF—9P-A190-K87 or

DESF—9S-A191-A197

### Cable strain relief

| No. of contact | Order No.    |
|----------------|--------------|
| 9              | 029-8757-009 |
| 15             | 029-8757-015 |
| 25             | 029-8758-025 |
| 37             | 029-8757-037 |

## Mounting combinations

Figure 1A

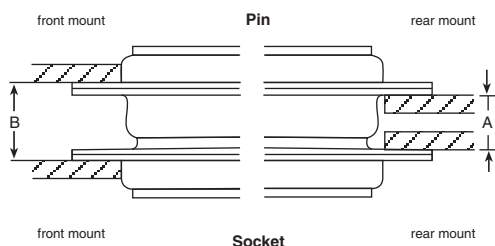


Figure 1B

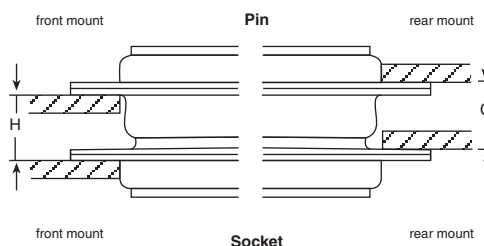


Figure 2

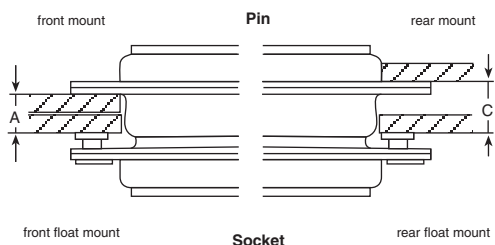
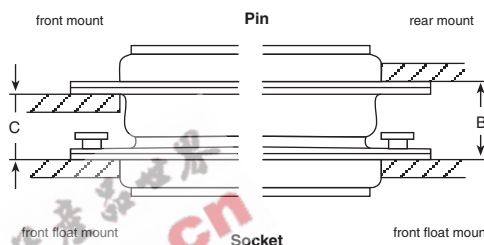


Figure 3



| Fig. | Size    | Pin      | Socket   | A     | B     | C     | H        |
|------|---------|----------|----------|-------|-------|-------|----------|
|      |         |          |          | +0,76 | +0,76 | +0,76 | _0,76/-0 |
| 1A   | A, E    | Standard | Standard | 6,35  | 7,63  | 6,99  | 6,99     |
| 1B   | B, C, D | Standard | Standard | 6,04  | 7,71  | 7,06  | 6,68     |
| 2    | A, E    | Standard | float    | 5,53  | –     | 6,18  | –        |
| 2    | B, C, D | Standard | float    | 5,23  | –     | 6,25  | –        |
| 2    | A, E    | float    | Standard | 5,53  | –     | 6,18  | –        |
| 2    | B, C, D | float    | Standard | 5,23  | –     | 5,87  | –        |
| 3    | A, E    | Standard | float    | –     | 8,59  | 7,95  | –        |
| 3    | B, C, D | Standard | float    | –     | 8,66  | 7,64  | –        |
| 3    | A, E    | float    | Standard | –     | 8,59  | 7,95  | –        |
| 3    | B, C, D | float    | Standard | –     | 8,51  | 7,87  | –        |

**Remark:**

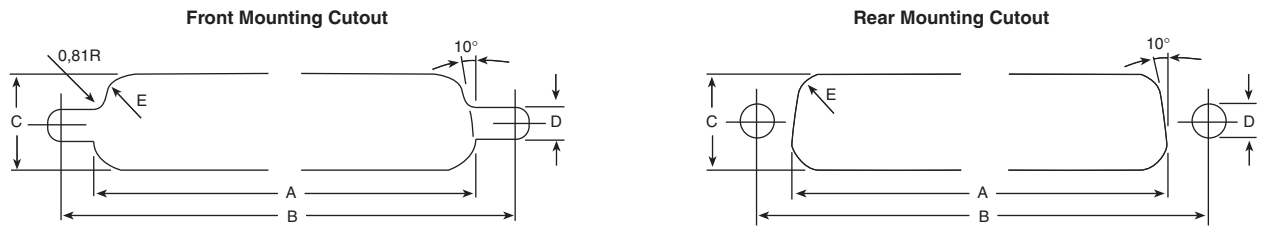
A, B, C and H are dimensions between panels and represent the recommended limit to be used in the design of the connector mounting method.

Standard pin assemblies contain 0,38 mm thick front shells on E and A sizes and 0,61 mm thick shells on B, C and D sizes.

# Cannon Speedy D



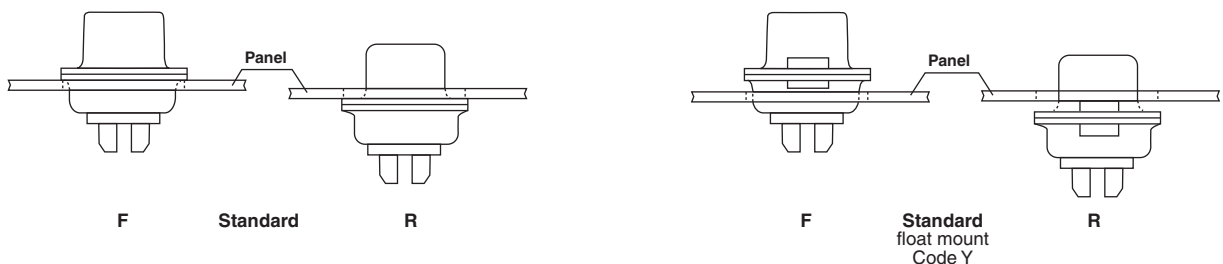
## Panel cut-outs



| no. of contacts | mounting | A    | B    | C    | D    | rad. E |
|-----------------|----------|------|------|------|------|--------|
|                 |          | ±0,2 | ±0,2 | ±0,2 | +0,1 | ±0,2   |
| 9               | front    | 22,2 | 25,0 | 13,0 | 3,0  | 2,1    |
|                 | rear     | 20,5 | 25,0 | 11,4 | 3,0  | 3,4    |
| 15              | front    | 30,5 | 33,3 | 13,0 | 3,0  | 3,4    |
|                 | rear     | 28,8 | 33,3 | 11,4 | 3,0  | 3,4    |
| 25              | front    | 44,3 | 47,0 | 13,0 | 3,0  | 2,1    |
|                 | rear     | 42,5 | 47,0 | 11,4 | 3,0  | 3,4    |
| 37              | front    | 60,7 | 63,5 | 13,0 | 3,0  | 2,1    |
|                 | rear     | 59,1 | 63,5 | 11,4 | 3,0  | 3,4    |
| 50              | front    | 58,3 | 61,1 | 15,8 | 3,0  | 2,1    |
|                 | rear     | 56,3 | 61,1 | 14,9 | 3,0  | 3,4    |

| No. of contacts | float mounting | A    | B    | C    | D    | rad. E |
|-----------------|----------------|------|------|------|------|--------|
|                 |                | ±0,2 | ±0,2 | ±0,2 | +0,1 | ±0,2   |
| 9               | front          | 23,0 | 25,0 | 13,8 | 2,2  | 2,1    |
|                 | rear           | 21,3 | 25,0 | 12,2 | 2,2  | 3,4    |
| 15              | front          | 31,3 | 33,3 | 13,8 | 2,2  | 2,1    |
|                 | rear           | 29,6 | 33,3 | 12,2 | 2,2  | 3,4    |
| 25              | front          | 45,1 | 47,0 | 13,8 | 2,2  | 2,1    |
|                 | rear           | 43,3 | 47,0 | 12,2 | 2,2  | 3,4    |
| 37              | front          | 61,5 | 63,5 | 13,8 | 2,2  | 2,1    |
|                 | rear           | 59,8 | 63,5 | 12,2 | 2,2  | 3,4    |
| 50              | front          | 59,2 | 61,1 | 16,6 | 2,2  | 2,1    |
|                 | rear           | 57,1 | 61,1 | 14,9 | 2,2  | 3,4    |

## Mounting



F – front mounting  
R – rear mounting

Dimensions shown in mm  
Specifications and dimensions subject to change.  
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