

# Cannon ZD Connectors

- Stamped contacts ZD\* series connectors.
- Closed-entry socket insulator for secure blind mating.
- Compatible with all other D\*Subminiature series.
- Particularly suitable for industrial applications (control and measurement), and for computer- telecom- or medical equipment.
- Glass filled thermoplastic Insulator, UL 94V-0 (E112081)
- Standard arrangement (9, 15, 25, 37, 50 contacts), and high density arrangement (15, 26, 44, 62, 78) are available for both male and female connectors
- The references mentioned in this catalogue are class 3. See notes for class 2.



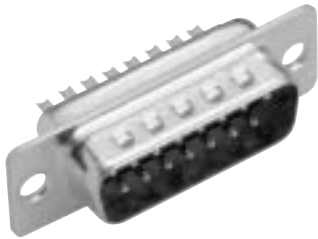
## Electrical characteristics

|                                               |                                                           |
|-----------------------------------------------|-----------------------------------------------------------|
| Rated current                                 | 5 A (Standard density)<br>2 A (High density)<br>1 A (IDC) |
| Dielectric withstanding voltage               | 1000 VAC for 1 min. (IDC 500 VAC for 1 min.)              |
| Contact resistance                            | 20 mΩ on mated contacts                                   |
| Operating temperature range                   | -55° / + 105°C                                            |
| Insulation resistance Standard / High density | 5000 MΩ at 500 VDC (IDC 1000 MΩ at 500 VDC)               |

## Mechanical characteristics

|                      |                                                                                         |
|----------------------|-----------------------------------------------------------------------------------------|
| Insulators           | Glass filled thermoplastic, black                                                       |
| Male Contacts        | Brass, stamped and formed                                                               |
| Female Contacts      | Phosphore bronze, stamped and formed                                                    |
| Finish               | Gold over nickel in contact area, balance tin                                           |
| Shells               | Steel, plated                                                                           |
| Mechanical endurance | Class 3: 50 mating / unmating cycles min.<br>Class 2: 200 mating / unmating cycles min. |

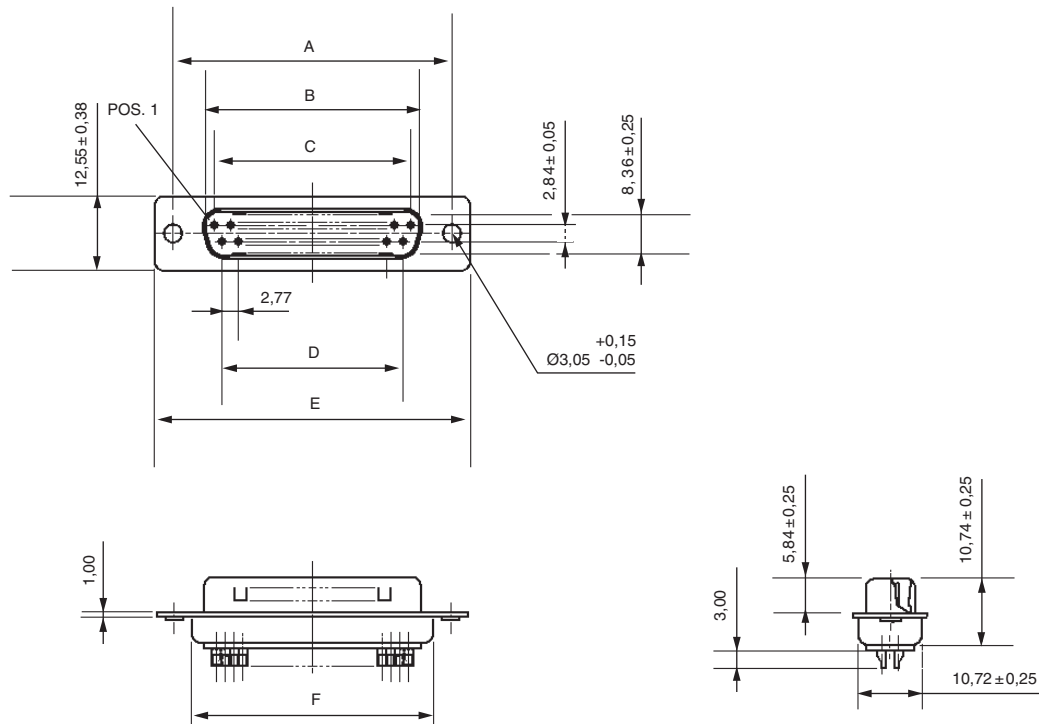
Plug 9 – 15 – 25 – 37 contacts



## Designation

| Shell size / Arrangement | Through hole | Captive nut thread 4-40 | Screwlock thread 4-40 |
|--------------------------|--------------|-------------------------|-----------------------|
| E / 9                    | ZDE9P        | ZDEE9P                  | ZDEE9P-AB             |
| A / 15                   | ZDA15P       | ZDAE15P                 | ZDAE15P-AB            |
| B / 25                   | ZDB25P       | ZDBE25P                 | ZDBE25P-AB            |
| C / 37                   | ZDC37P       | ZDCE37P                 | ZDCE37P-AB            |

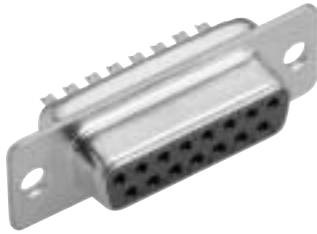
**Note:** Class 2 - Add suffix A191 Example: ZDE9P-A191



| Shell | A ± 0,13 | B ± 0,25 | C ± 0,13 | D ± 0,13 | E ± 0,38 | F ± 0,25 |
|-------|----------|----------|----------|----------|----------|----------|
| E     | 24,99    | 16,92    | 11,08    | 8,31     | 30,89    | 19,28    |
| A     | 33,32    | 25,25    | 19,39    | 16,62    | 39,10    | 27,51    |
| B     | 47,04    | 38,96    | 33,24    | 30,47    | 53,09    | 41,30    |
| C     | 63,50    | 55,25    | 49,86    | 47,09    | 69,40    | 57,71    |

- Mounting options, page 38
- Panel cutout, page 39
- Accessories, page 33

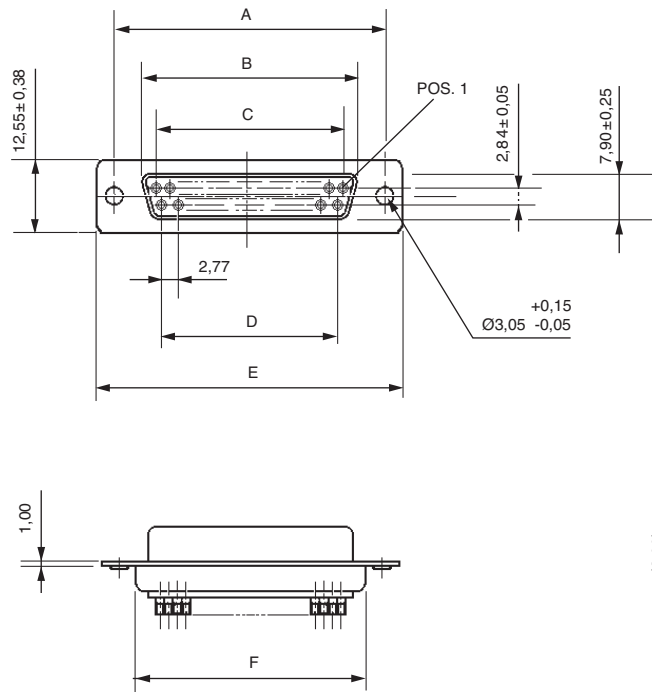
Receptacle 9 – 15 – 25 – 37 contacts



## Designation

| Shell size / Arrangement | Through hole | Captive nut thread 4-40 | Screwlock thread 4-40 |
|--------------------------|--------------|-------------------------|-----------------------|
| E / 9                    | ZDE9S        | ZDEE9S                  | ZDEE9S-AB             |
| A / 15                   | ZDA15S       | ZDAE15S                 | ZDAE15S-AB            |
| B / 25                   | ZDB25S       | ZDBE25S                 | ZDBE25S-AB            |
| C / 37                   | ZDC37S       | ZDCE37S                 | ZDCE37S-AB            |

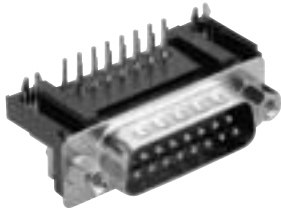
**Note:** Class 2 - Add suffix A191 Example: ZDE9S-A191



| Shell | A ± 0,13 | B ± 0,25 | C ± 0,13 | D ± 0,13 | E ± 0,38 | F ± 0,25 |
|-------|----------|----------|----------|----------|----------|----------|
| E     | 24,99    | 16,33    | 10,96    | 8,22     | 30,89    | 19,28    |
| A     | 33,32    | 24,66    | 19,18    | 16,44    | 39,10    | 27,51    |
| B     | 47,04    | 38,38    | 33,24    | 30,47    | 53,09    | 41,30    |
| C     | 63,50    | 54,84    | 49,86    | 47,09    | 69,40    | 57,71    |

- Mounting options, page 38
- Panel cutout, page 39
- Accessories, page 33

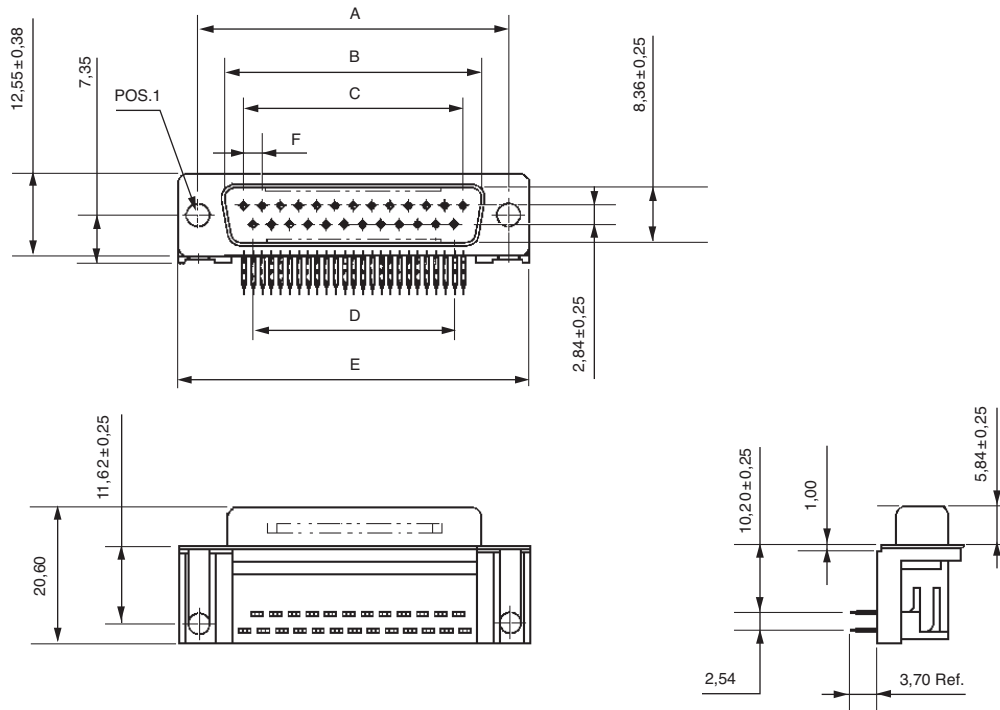
Plug 9 – 15 – 25 – 37 contacts



## Designation

| Shell size / Arrangement | Boardlock and screwlock 4-40 2B | Boardlock, threaded insert 4-40 2B |
|--------------------------|---------------------------------|------------------------------------|
| E / 9                    | ZDE9P-1AKN-146                  | ZDEL9P-1AKN-146                    |
| A / 15                   | ZDA15P-1AKN-146                 | ZDAL15P-1AKN-146                   |
| B / 25                   | ZDB25P-1AKN-146                 | ZDBL25P-1AKN-146                   |
| C / 37                   | ZDC37P-1AKN-146                 | ZDCL37P-1AKN-146                   |

**Note:** Class 2 - Add suffix A191 Example: ZDE9P-1AKN-A191-146



| Shell | A ± 0,25 | B ± 0,25 | C ± 0,13 | D ± 0,13 | E ± 0,38 | F ± 0,05±0.13 |
|-------|----------|----------|----------|----------|----------|---------------|
| E     | 24,99    | 16,92    | 10,96    | 8,22     | 30,89    | 2,74          |
| A     | 33,32    | 25,25    | 19,18    | 16,44    | 39,10    | 2,74          |
| B     | 47,04    | 38,96    | 33,24    | 30,47    | 53,09    | 2,77          |
| C     | 63,50    | 55,42    | 49,86    | 47,09    | 69,40    | 2,77          |

- PCB hole pattern, page 35
- Panel cutout, page 39

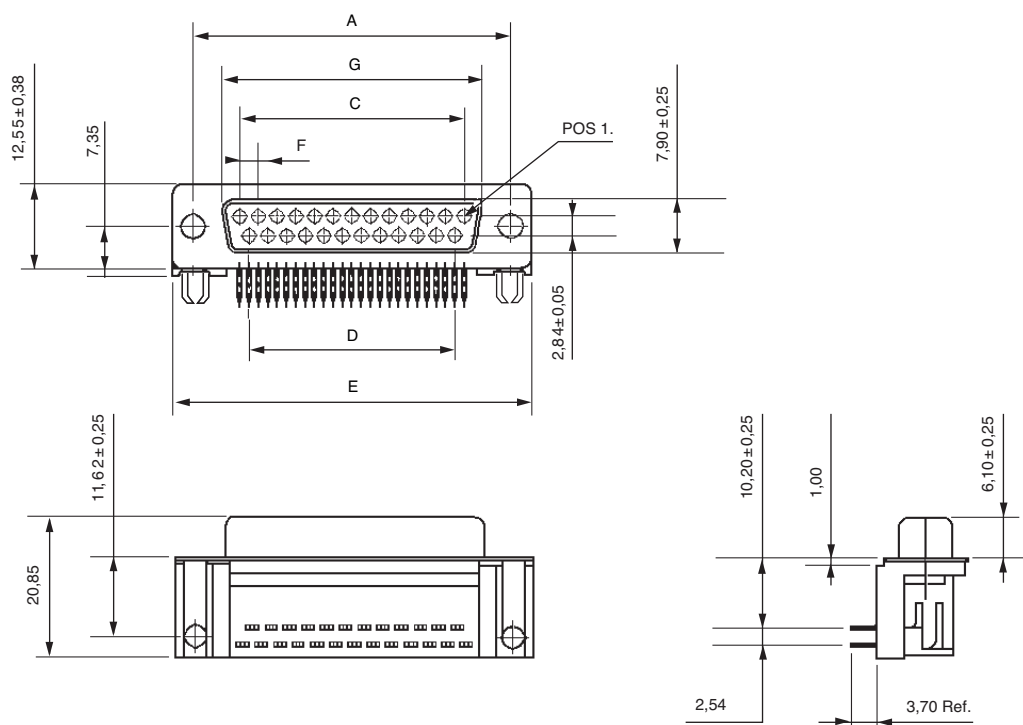
Receptacle 9 – 15 – 25 – 37 contacts



## Designation

| Shell size / Arrangement | Boardlock and screwlock 4-40 2B | Boardlock, threaded insert 4-40 2B |
|--------------------------|---------------------------------|------------------------------------|
| E / 9                    | ZDE9S-1AKN-146                  | ZDEL9S-1AKN-146                    |
| A / 15                   | ZDA15S-1AKN-146                 | ZDAL15S-1AKN-146                   |
| B / 25                   | ZDB25S-1AKN-146                 | ZDBL25S-1AKN-146                   |
| C / 37                   | ZDC37S-1AKN-146                 | ZDCL37S-1AKN-146                   |

**Note:** Class 2 - Add suffix A191 Example: ZDE9S-1AKN-A191-146



| Shell | A ± 0,25 | C ± 0,13 | D ± 0,13 | E ± 0,38 | F    | G ± 0,25 |
|-------|----------|----------|----------|----------|------|----------|
| E     | 24,99    | 10,96    | 8,22     | 30,89    | 2,74 | 16,33    |
| A     | 33,32    | 19,18    | 16,44    | 39,10    | 2,74 | 24,66    |
| B     | 47,04    | 33,24    | 30,47    | 53,09    | 2,77 | 38,38    |
| C     | 63,50    | 49,86    | 47,09    | 69,40    | 2,77 | 54,84    |

- PCB hole pattern, page 35
- Panel cutout, page 39