Amphenol

Amphenol-Tuchel Electronics GmbH

# Series C 146

## Heavy Duty Connectors
## Core Programme

### The Company

*Amphenol-Tuchel Electronics GmbH is a member of the USA based Amphenol Corporation. With our own global presence we offer our customers exceptional technical support and service in the areas of development, production and distribution. Amphenol-Tuchel Electronics GmbH has a successful history as a partner to our customers and sets standards for connector technology.*

### General information

*These connectors are designed and produced in conformity with the low voltage directive (73/23/EWG) respectively Gerätesicherheitsgesetz (German law) and are especially in accordance with the standards DIN EN 61984 (VDE0627); IEC 60664-1 (VDE 0110-1) nad IEC 60529.*
*The connectors may be used only within the technical ratings.*

*The indicated dimensions with the panel cut-outs represent reference values and are in the concrete application with products to be co-ordinated.*

*It is the users responsability to check whether the components illustrated in this catalogue comply with different regulations from those stated in special fields of application which we are unable to foresee. We reserve the right to modify designs in order to improve quality, keep pace with technological advancement or meet particular requirements in production. This catalogue must not be used in any form or manner without our prior approval in writing (Copyright Law, Fair Trading Law, Civil Code).*

# C 146

## Characteristics

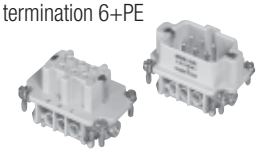
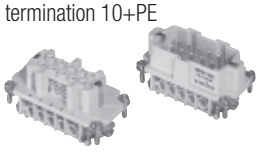
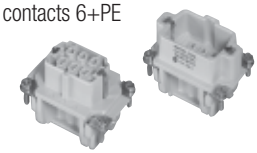
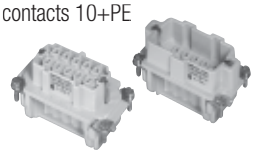
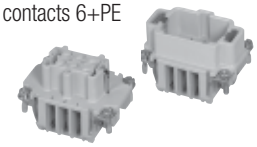
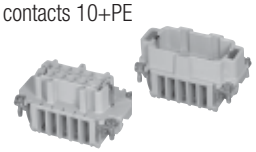
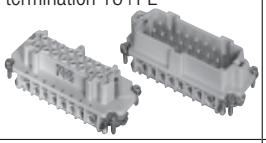
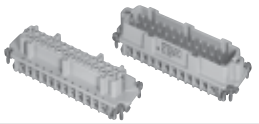
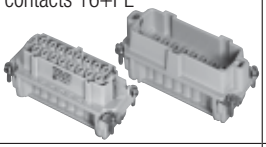
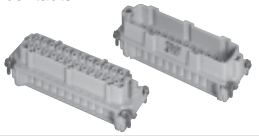
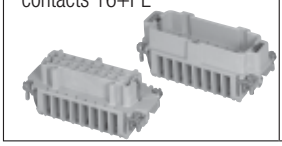
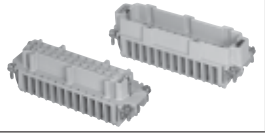
| Series | C 146 D | | | | | | | C 146 DD | | | | C 146 E | | | | | C 146 EE | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Number of contacts | 7+PE, 8 | 15+ PE | 25+ PE | 40+ PE | 50+ PE | 64+ PE | 128+ PE | 24+ PE | 42+ PE | 72+ PE | 108+ PE | 6 + | 10 + | 16 + | 24 + | 48 + | 10+ PE | 18+ PE | 32+ PE | 46+ PE |
| Termination | crimp | | | | | | | crimp | | | | crimp / screw | | | | | | | | |
| Wire gauge | 0,14 - 2,5 | | | | | | | 0,14 - 2,5 | | | | 0,5 -4,0 0,25 - 2,5 | | | | | 0,5 - 4,0 | | | |
| Flammability (UL 94) | V - 0 | | | | | | | V - 0 | | | | V - 0 | | | | | V - 0 | | | |
| Certifications | UL, CSA | | | | | | | UL, CSA | | | | | | | | | UL, CSA | | | |
| according DIN EN 175301-801 | | ✓ | ✓ | ✓ | | ✓ | | | | | | | | | | | | | | |
| Insertion and withdrawal force in N | 10 - 15 | 20 - 30 | 40 - 60 | 60 - 90 | 80 - 120 | 100 - 150 | 200 - 300 | | | | | SCR[1]: 20-30 CR: 10-20 | SCR[1]: 40-50 CR: 30-40 | SCR[1]: 80-100 CR: 45-60 | SCR[1]: 100-120 CR: 70-100 | SCR[1]: 200-240 CR: 140-200 | | | | |
| Rated voltage (VDE) | 250 | | | | | | | 250 | | | | 400 | | | | | 500 | | | |
| Rated voltage (UL, CSA) in V | 600 | | | | | | | 600 | | | | 600 | | | | | 600 | | | |
| Pollution degree | 3 | | | | | | | 2 (3 in mated and locked condition) | | | | 3 | | | | | 3 | | | |
| Installation (overvoltage) category | III | | | | | | | III | | | | III | | | | | III | | | |
| Rated current (Tu=40°C) in A | 16 | 12 | | 10 | | | | 9 | 8 | | | 22 | 19 | | 18 | | 16 | | | |
| Lower temperature in °C | -40 | | | | | | | -40 | | | | -40 | | | | | -40 | | | |
| Upper temperature in °C | +125 | | | | | | | +100 | | | | +125 | | | | | +100 | | | |

[1]SCR = screw, CR = crimp

| Series | C 146 M | | | | | | | | | | C 146 A | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Number of contacts | 20 | 10 | 10 | 5 | 3 | 4+PE/5 | 3 | 3 | Rj45 + 4 | Pneu | 3,4 + | 10 + | 16 + | 32 + |
| Termination | crimp | crimp | crimp | crimp | crimp | crimp | crimp&solder | crimp | crimp&push | tube | | | | |
| Contacts | stamped | stamped | turned | turned | turned | stamped | Coax | turned | turned | termination | screw | | | |
| Wire gauge | 0,09 - 0,5 | 0,14 - 2,5 | 0,14 - 2,5 | 0,5 - 4,0 | 1,5 - 10 | 0,5 - 4,0 | | 1,5 - 10 | 0,14 - 2,5 | 2,5 + 4,0 | 0,25 - 2,5 | | | |
| Flammability (UL 94) | V - 0 | | | | | | | | | | V - 0 | | | |
| Certifications | UL, CSA, SEV, VDE | | | | | | | | | | UL, CSA | | | |
| Insertion and withdrawal force in N | 10 - 15 | 20 - 25 | 25 - 30 | 25 - 30 | 20 - 30 | 15 - 20 | 25 - 30 | 20 - 30 | 15 - 20 | | 15 - 20 | 50 - 70 | 80 - 100 | 160 - 200 |
| Rated voltage (VDE) | 63 | 250 | 250 | 400 | 630 | 1000 | 250 | 1000 | 125V + 400V | | 400 | 250 | | |
| Rated voltage (UL, CSA) in V | 63 | 250 | 250 | 400 | 630 | 1000 | 250 | 1000 | 125V + 400V | | 600 | | | |
| Pollution degree | 3 | | | | | | | | | | 3 | | | |
| Installation (overvoltage) category | III | III | III | | | | | | | | III | | | |
| Rated current (Tu=40°C) in A | 5 | 10 | 10 | 20 | 50 | 16 | | 50 | 1,5 and 13 | | 18 | 16 | 14 | |
| Lower temperature in °C | -40 | | | | | | | | -20 | | -40 | | | |
| Upper temperature in °C | + 125 | | + 100 | + 125 | | | | | + 80 | + 100 | + 100 | | | |

# C 146 E

## Inserts

| Description - Figure | Part No. Male insert | Part No. Female insert | Description - Figure | Part No. Male insert | Part No. Female insert |
|---|---|---|---|---|---|
| Contact insert screw termination 6+PE  | C146 10A006 102 1 [1] (*with wire protection*) | C146 10B006 102 1 [1] (*with wire protection*) | Contact insert screw termination 10+PE  | C146 10A010 102 1 [1] (*with wire protection*) | C146 10B010 102 1 [1] (*with wire protection*) |
| Contact insert for stamped contacts 6+PE  | C146 10A006 000 1 | C146 10B006 000 1 | Contact insert for stamped contacts 10+PE  | C146 10A010 000 1 | C146 10B010 000 1 |
| Contact insert for turned contacts 6+PE  | C146 10A006 500 1 | C146 10B006 500 1 | Contact insert for turned contacts 10+PE  | C146 10A010 500 1 | C146 10B010 500 1 |
| Contact insert screw termination 16+PE  | C146 10A016 102 1 [1] (*with wire protection*) | C146 10B016 102 1 [1] (*with wire protection*) | Contact insert screw termination [2] 24+PE  | C146 10A024 102 1 [1] (*with wire protection*) | C146 10B024 102 1 [1] (*with wire protection*) |
| Contact insert for stamped contacts 16+PE  | C146 10A016 000 1 | C146 10B016 000 1 | Contact insert for stamped contacts [2] 24+PE  | C146 10A024 000 1 | C146 10B024 000 1 |
| Contact insert for turned contacts 16+PE  | C146 10A016 500 1 | C146 10B016 500 1 | Contact insert for turned contacts [2] 24+PE  | C146 10A024 500 1 | C146 10B024 500 1 |

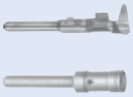
# C 146 EE

## Inserts

| Description - Figure | Part No. Male insert | Part No. Female insert | Description - Figure | Part No. Male insert | Part No. Female insert |
|---|---|---|---|---|---|
| Contact insert 10+PE | C146 10A010 500 10 | C146 10B010 500 10 | *Contact insert* 18+PE | C146 10A018 500 10 | C146 10B018 500 10 |
| Contact insert 32+PE | C146 10A032 500 10 | C146 10B032 500 10 | Contact insert 46+PE | C146 10A046 500 10 | C146 10B046 500 10 |

[1] For versions without wire protection please refer C146 main catalog or www. amphenol.info
[2] For 48 pol version please refer C146 main catalog or www.amphenol.info

# C 146 E / C 146 EE



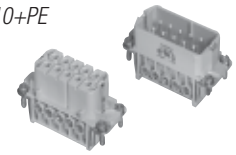
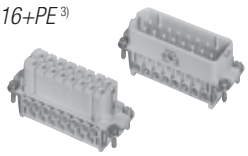
## Contacts[1)]

| Supplied as | for wire gauge | AWG | Pieces | Part No. Male contact | Part No. Female contact |
|---|---|---|---|---|---|
| **Stamped single contacts** | | | | | |
| | 0,5 - 1,5 mm² | 20 - 16 | 100 | VN01 025 0001 (101) | VN02 025 0001 (101) |
| | 1,5 - 2,5 mm² | 16 - 14 | 100 | VN01 025 0010 (101) | VN02 025 0010 (101) |
| **Stamped contacts on reel for hand crimp tools** | | | | | |
| | 0,5 - 1,5 mm² | 20 - 16 | 200 | ZN01 025 0001 (1) | ZN02 025 0001 (1) |
| | 1,5 - 2,5 mm² | 16 - 14 | 100 | ZN01 025 0010 (1) | ZN02 025 0010 (1) |
| **Stamped contacts on reel for crimp machines** | | | | | |
| Contact feeding right | 0,5 - 1,5 mm² | 20 - 16 | 2000 | HN01 025 0001 (1) | HN02 025 0001 (1) |
| hand side | 1,5 - 2,5 mm² | 16 - 14 | 2000 | HN01 025 0010 (1) | HN02 025 0010 (1) |
| Contact feeding left | 0,5 - 1,5 mm² | 20 - 16 | 2000 | TN01 025 0001 (1) | TN02 025 0001 (1) |
| hand side | 1,5 - 2,5 mm² | 16 - 14 | 2000 | TN01 025 0010 (1) | TN02 025 0010 (1) |
| **Turned crimp contacts** | | | | | |
| Single contact | 0,5 mm² | 20 | 100 | VN01 025 0035 (1)C | VN02 025 0035 (1)C |
| | 0,75 - 1,0 mm² | 18 | 100 | VN01 025 0036 (1)C | VN02 025 0036 (1)C |
| | 1,5 mm² | 16 | 100 | VN01 025 0037 (1)C | VN02 025 0037 (1)C |
| | 2,5 mm² | 14 | 100 | VN01 025 0038 (1)C | VN02 025 0038 (1)C |
| | 4,0 mm² | 12 | 100 | VN01 025 0039 (1)C | VN02 025 0039 (1)C |

[1)] For gold plated contacts please refer C146 main catalog or www.amphenol.info

# C 146 A

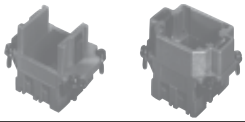
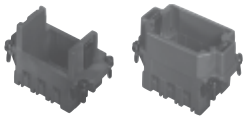
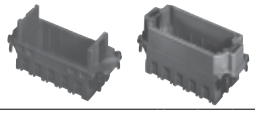
## Inserts

| Description - Figure | Part No. Male insert | Part No. Female insert | Description - Figure | Part No. Male insert | Part No. Female insert |
|---|---|---|---|---|---|
| *Contact insert screw termination* 3+PE | C146 10A003 002 4 | C146 10B003 002 4 | *Contact insert screw termination* 4+PE | C146 10A004 002 4 | C146 10B004 002 4 |
| *Contact insert screw termination* 10+PE  | C146 10A010 102 4 [2)] (*with wire protection*) | C146 10B010 102 4 [2)] (*with wire protection*) | *Contact insert screw termination* 16+PE [3)]  | C146 10A016 102 4 [2)] (*with wire protection*) | C146 10B016 102 4 [2)] (*with wire protection*) |

[2)] For versions without wire protection please refer C146 main catalog or www. amphenol.info
[3)] For 32 pol versions please refer C146 main catalog or www.amphenol.info

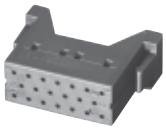
# C 146 M

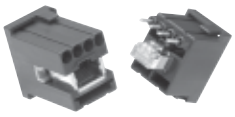
## Frames

| Description - Figure | Positions | Part No. Frame for pin modules | Part No. Frame for socket module |
|---|---|---|---|
| Frame for 2 modules  | A - B | C146 P06 001 G8<br>C146 P06 002 G8 (2 x PE) | C146 S06 001 G8<br>C146 S06 002 G8 (2 x PE) |
| Frame for 3 modules  | A - C | C146 P10 001 G8<br>C146 P10 002 G8 (2 x PE) | C146 S10 001 G8<br>C146 S10 002 G8 (2 x PE) |
| Frame for 5 modules  | A - E | C146 P16 001 G8<br>C146 P16 002 G8 (2 x PE) | C146 S16 001 G8<br>C146 S16 002 G8 (2 x PE) |
| Frame for 7 modules | A - G<br>T - Z | C146 P24 001 G8<br>C146 P24 002 G8 (2 x PE)<br>C146 P24 101 G8<br>C146 P24 102 G8 (2 x PE) | C146 S24 001 G8<br>C146 S24 002 G8 (2 x PE)<br>C146 S24 101 G8<br>C146 S24 102 G8 (2 x PE) |

# C 146 M

## Modules Contacts

| Description - Figure | Part No. pin module | Part No. socket module | Supplied as | for wire gauge | AWG | Pieces | Part No. Male contacts | Part No. Female contacts |
|---|---|---|---|---|---|---|---|---|
| 20 contacts for stamped contacts  | C146 A20 001 G8 | C146 B20 001 G8 | **Single contacts for hand crimping tools** | | | | **gold plating** | |
| | | | | 0,09 - 0,25 mm² | 28-24 | 100 | VN01 010 0130 (2) | VN02 010 0130 (2) |
| | | | | 0,25 - 0,50 mm² | 24-20 | 100 | VN01 010 0131 (2) | VN02 010 0131 (2) |
| | | | **Contacts on reel for hand crimping tools** | | | | | |
| | | | | 0,09 - 0,25mm² | 28-24 | 500 | ZN01 010 0130 (2) | ZN02 010 0130 (2) |
| | | | | 0,25 - 0,50 mm² | 24-20 | 500 | ZN01 010 0131 (2) | ZN02 010 0131 (2) |
| | | | **Contacts on reel for crimp machines** | | | | | |
| | | | Contact feeding left hand side [2] | 0,09 - 0,25 mm² | 28-24 | 2000 | TN01 010 0130 (2) | TN02 010 0130 (2) |
| | | | | 0,25 - 0,50 mm² | 24-20 | 2000 | TN01 010 0131 (2) | TN02 010 0131 (2) |
| 10 contacts for stamped contacts | C146 D10 001 E8 | C146 C10 001 G8 | **Stamped single contacts** | | | | **silver plating** | |
| | | | | 0,14 - 0,5 mm² | 26-20 | 100 | VN01 016 0003 (1) | VN02 016 0003 (1) |
| | | | | 0,5 - 1,5 mm² | 20-16 | 100 | VN01 016 0002 (1) | VN02 016 0002 (1) |
| | | | Standard | 1,5 - 2,5 mm² | 16-14 | 100 | VN01 016 0005 (1) | VN02 016 0005 (1) |
| | | | High current | 0,5 - 1,5 mm² | 20-16 | 100 | VN01 016 0015 (1) | VN02 016 0015 (1) |
| | | | | 1,5 - 2,5 mm² | 16-14 | 100 | VN01 016 0016 (1) | VN02 016 0016 (1) |
| | | | **Stamped contacts on reel for hand crimp tools** | | | | **silver plating** | |
| | | | | 0,14 - 0,5 mm² | 26-20 | 200 | ZN01 016 0003 (1) | ZN02 016 0003 (1) |
| | | | | 0,5 - 1,5 mm² | 20-16 | 200 | ZN01 016 0002 (1) | ZN02 016 0002 (1) |
| | | | Standard | 1,5 - 2,5 mm² | 16-14 | 100 | ZN01 016 0005 (1) | ZN02 016 0005 (1) |
| | | | High current | 0,5 - 1,5 mm² | 20-16 | 200 | ZN01 016 0015 (1) | ZN02 016 0015 (1) |
| | | | | 1,5 - 2,5 mm² | 16-14 | 100 | ZN01 016 0016 (1) | ZN02 016 0016 (1) |
| | | | **Stamped contacts on reel for crimp machines** | | | | **silver plating** | |
| | | | Contact feeding left hand side [2] | 0,14 - 0,5 mm² | 26-20 | 2000 | TN01 016 0003 (1) | TN02 016 0003 (1) |
| | | | | 0,5 - 1,5 mm² | 20-16 | 2000 | TN01 016 0002 (1) | TN02 016 0002 (1) |
| | | | Standard | 1,5 - 2,5 mm² | 16-14 | 2000 | TN01 016 0005 (1) | TN02 016 0005 (1) |
| | | | High current | 0,5 - 1,5 mm² | 20-16 | 2000 | TN01 016 0015 (1) | TN02 016 0015 (1) |
| | | | | 1,5 - 2,5 mm² | 16-14 | 2000 | TN01 016 0016 (1) | TN02 016 0016 (1) |
| 10 contacts for turned contacts | C146 A10 001 E8 | C146 B10 001 E8 | **Turned crimp contacts** | | | | **silver plating** | |
| | | | Single contact | 0,14 - 0,37 mm² | 26-22 | 100 | VN01 016 0024 (1) C | VN02 016 0024 (1) C |
| | | | | 0,5 mm² | 20 | 100 | VN01 016 0025 (1) C | VN02 016 0025 (1) C |
| | | | | 0,75 - 1,0 mm² | 20-16 | 100 | VN01 016 0026 (1) C | VN02 016 0026 (1) C |
| | | | | 1,5 mm² | 16-15 | 100 | VN01 016 0027 (1) C | VN02 016 0027 (1) C |
| | | | | 2,5 mm² | 14 | 100 | VN01 016 0028 (1) C | VN02 016 0028 (1) C |

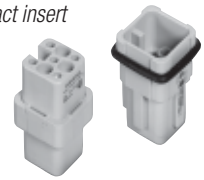
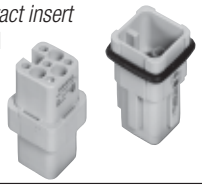
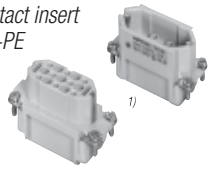
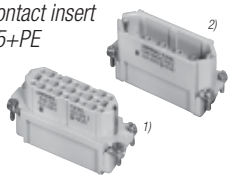
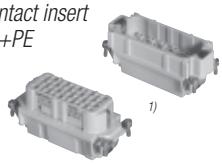
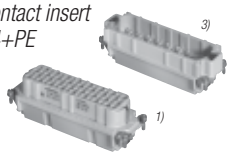
| Description - Figure | Part No. pin module | Part No. socket module | Turned crimp contacts Supplied as | for wire gauge | AWG | Pieces | silver plating Male contacts | silver plating Female contacts |
|---|---|---|---|---|---|---|---|---|
| 5 contacts for turned contacts | C146 A05 001 E8[1] | C146 B05 001 E8[1] | Single contact | 0,5 mm² | 20 | 100 | VN01 025 0029 (1)C | VN02 025 0029 (1)C |
| | | | | 0,75 - 1,0 mm² | 18 | 100 | VN01 025 0030 (1)C | VN02 025 0030 (1)C |
| | | | | 1,5 mm² | 16 | 100 | VN01 025 0031 (1)C | VN02 025 0031 (1)C |
| | | | | 2,5 mm² | 14 | 100 | VN01 025 0032 (1)C | VN02 025 0032 (1)C |
| | | | | 4,0 mm² | 12 | 100 | VN01 025 0033 (1)C | VN02 025 0033 (1)C |
| 3 contacts for turned contacts | C146 A03 001 E8 | C146 B03 001 E8 | **Turned crimp contacts** | | | | | |
| | | | Single contact | 1,5 mm² | 16 | 100 | VN01 036 0004 (1)C | VN02 036 0004 (1)C |
| | | | | 2,5 mm² | 14 | 100 | VN01 036 0005 (1)C | VN02 036 0005 (1)C |
| | | | | 4,0 mm² | 12 | 100 | VN01 036 0001 (1)C | VN02 036 0001 (1)C |
| | | | | 6,0 mm² | 10 | 100 | VN01 036 0002 (1)C[1] | VN02 036 0002 (1)C[1] |
| | | | | 10,0 mm² | 8 | 100 | VN01 036 0003 (1)C[1] | VN02 036 0003 (1)C[1] |
| 5 contacts for stamped contacts | C146 D04 001 E8 (4 pol) | C146 C04 001 E8 (4 pol) | **Stamped single contacts** | | | | | |
| | | | | 0,5 - 1,5 mm² | 20-16 | 100 | VN01 025 0001 (101) | VN02 025 0001 (101) |
| | | | | 1,5 - 2,5 mm² | 16-14 | 100 | VN01 025 0010 (101) | VN02 025 0010 (101) |
| | | | | 2,5 - 4,0 mm² | 12 | 100 | VN01 025 0043 (1) | VN02 025 0043 (1) |
| | C146 D05 001 E8 (4 + PE) | C146 C05 001 E8 (4 + PE) | **Contacts on reel for hand crimping tools** | | | | | |
| | | | | 0,5 - 1,5 mm² | 20-16 | 200 | ZN01 025 0001 (1) | ZN02 025 0001 (1) |
| | | | | 1,5 - 2,5 mm² | 16-14 | 100 | ZN01 025 0010 (1) | ZN02 025 0010 (1) |
| | C146 D05 801 E8 (5 pol) | C146 C05 801 E8 (5 pol) | **Contacts on reel for crimp machines** | | | | | |
| | | | Contact feeding left hand side [2] | 0,5 - 1,5 mm² | 20-16 | 2000 | TN01 025 0001 (1) | TN02 025 0001 (1) |
| | | | | 1,5 - 2,5 mm² | 16-14 | 2000 | TN01 025 0010 (1) | TN02 025 0010 (1) |
| | | | | 2,5 - 4,0 mm² | 12 | 2000 | TN01 025 0043 (1) | TN02 025 0043 (1) |
| 3 contacts for coax contacts | C146 A03 501 E8 | C146 B03 501 E8 | **Crimp contacts for cable size** | | | | | |
| | | | Single contact | RG 174, 179, 316 | | 1 | 17 DM 537 401 | 17DM 537 421 |
| | | | | RG 58 | | 1 | 17 DM 537 405 | 17DM 537 425 |
| | | | | | | | | |
| 3 contacts for turned contacts | C146 A03 801 E8 | C146 B03 801 E8 | **Turned crimp contacts** | | | | | |
| | | | Single contact | 1,5 mm² | 16 | 100 | VN01 036 0004 (1) C | VN02 036 0004 (1) C |
| | | | | 2,5 mm² | 14 | 100 | VN01 036 0005 (1) C | VN02 036 0005 (1) C |
| | | | | 4,0 mm² | 12 | 100 | VN01 036 0001 (1) C | VN02 036 0001 (1) C |
| | | | | 6,0 mm² | 10 | 100 | VN01 036 0002 (1) C | VN02 036 0002 (1) C |
| | | | | 10,0 mm² | 8 | 100 | VN01 036 0003 (1) C | VN02 036 0003 (1) C |
| *RJ module*  | C146 E12 001 E8 | C146 F12 001 G8 | **Turned crimp contacts** | | | | | |
| | | | | 0,14 - 0,37 mm² | 26-22 | 100 | VN01 016 0024 (1) C | VN02 016 0024 (1) C |
| | | | | 0,5 mm² | 20 | 100 | VN01 016 0025 (1) C | VN02 016 0025 (1) C |
| | | | | 0,75 - 1,0 mm² | 20-16 | 100 | VN01 016 0026 (1) C | VN02 016 0026 (1) C |
| | | | | 1,5 mm² | 16-15 | 100 | VN01 016 0027 (1) C | VN02 016 0027 (1) C |
| | | | | 2,5 mm² | 14 | 100 | VN01 016 0028 (1) C | VN02 016 0028 (1) C |
| *Pneumatic module, 1 or 2 connections* | C146 G01 014 G8 (2,5 mm) | C146 H01 034 G8 (2,5 mm) | | | | | | |
| | C146 G01 024 G8 (4,0 mm) | C146 H01 044 G8 (4,0 mm) | | | | | | |
| | C146 G02 014 G8 (2,5 mm) | C146 H02 034 G8 (2,5 mm) | | | | | | |
| | C146 G02 024 G8 (4,0 mm) | C146 H02 044 G8 (4,0 mm) | | | | | | |

[1] For gold plated contacts please refer C146 main catalog or www.amphenol.info.

[2] For right feeding contacts please refer C146 main catalog or www.amphenol.info.

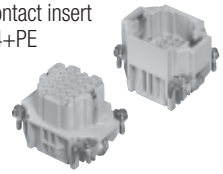
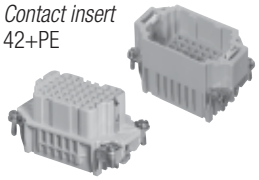
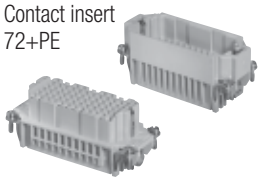
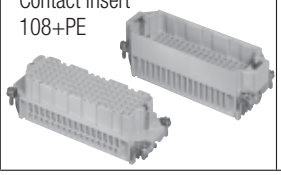
# C 146 D

## Inserts

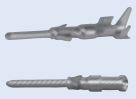
| Description - Figure | Part No. Male insert | Part No. Female insert | Description - Figure | Part No. Male insert | Part No. Female insert |
|---|---|---|---|---|---|
| *Contact insert 7+PE*  | C146 10A007 000 2 *(for stamped crimp contacts)* C146 10A007 500 2 *(for turned crimp contacts)* | C146 10B007 000 2 *(for stamped crimp contacts)* C146 10B007 500 2 *(for turned crimp contacts)* | *Contact insert 8 pol*  | C146 10A008 000 2 *(for stamped crimp contacts)* C146 10A008 500 2 *(for turned crimp contacts)* | C146 10B008 000 2 *(for stamped crimp contacts)* C146 10B008 500 2 *(for turned crimp contacts)* |
| *Contact insert 15+PE*  | C146 10A015 000 2 *(for stamped crimp contacts)* C146 10A015 500 2 *(for turned crimp contacts)* | C146 10B015 000 2 *(for stamped crimp contacts)* C146 10B015 500 2 *(for turned crimp contacts)* | *Contact insert 25+PE*  | C146 10A025 000 2 *(for stamped crimp contacts)* C146 10A025 500 2 *(for turned crimp contacts)* | C146 10B025 000 2 *(for stamped crimp contacts)* C146 10B025 500 2 *(for turned crimp contacts)* |
| *Contact insert 40+PE*  | C146 10A040 000 2 *(for stamped crimp contacts)* C146 10A040 500 2 *(for turned crimp contacts)* | C146 10B040 000 2 *(for stamped crimp contacts)* C146 10B040 500 2 *(for turned crimp contacts)* | *Contact insert 64+PE*  | C146 10A064 000 2 *(for stamped crimp contacts)* C146 10A064 500 2 *(for turned crimp contacts)* | C146 10B064 000 2 *(for stamped crimp contacts)* C146 10B064 500 2 *(for turned crimp contacts)* |

# C 146 DD

## Inserts

| Description - Figure | Part No. Male insert | Part No. Female insert | Description - Figure | Part No. Male insert | Part No. Female insert |
|---|---|---|---|---|---|
| Contact insert 24+PE  | C146 10A024 000 9 *(for turned crimp contacts)* | C146 10B024 000 9 *(for turned crimp contacts)* | *Contact insert 42+PE*  | C146 10A042 000 9 *(for turned crimp contacts)* | C146 10B042 000 9 *(for turned crimp contacts)* |
| Contact insert 72+PE  | C146 10A072 000 9 *(for turned crimp contacts)* | C146 10B072 000 9 *(for turned crimp contacts)* | Contact insert 108+PE  | C146 10A108 000 9 *(for turned crimp contacts)* | C146 10B108 000 9 *(for turned crimp contacts)* |

# C 146 D / C 146 DD

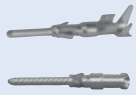


## Contacts[4]

| Supplied as | for wire gauge | AWG | Pieces | Part No. Male contact | Part No. Female contact |
|---|---|---|---|---|---|
| **Stamped single contacts** | | | | | |
| Standard | 0,14 - 0,5 mm² | 26 - 20 | 100 | VN01 016 0003 (1) | VN02 016 0003 (1) |
| Standard | 0,5 - 1,5 mm² | 20 - 16 | 100 | VN01 016 0002 (1) | VN02 016 0002 (1) |
| Standard | 1,5 - 2,5 mm² | 16 - 14 | 100 | VN01 016 0005 (1) | VN02 016 0005 (1) |
| High current | 0,5 - 1,5 mm² | 20 - 16 | 100 | VN01 016 0015 (1) | VN02 016 0015 (1) |
| High current | 1,5 - 2,5 mm² | 16 - 14 | 100 | VN01 016 0016 (1) | VN02 016 0016 (1) |

[1] For versions with two PE contacts please refer C146 main catalog or www.amphenol.info
[2] For 50 pol versions please refer C146 main catalog or www.amphenol.info
[3] For 128 pol versions please refer C146 main catalog or www.amphenol.info
[4] For gold plated contacts please refer C146 main catalog or www.amphenol.info

# C 146 D / C 146 DD



## Contacts[1)]

| Supplied as | for wire gauge | AWG | Pieces | Part No. Male contact | Part No. Female contact |
|---|---|---|---|---|---|
| **Stamped Contacts on reel for hand crimp machines** | | | | | |
| Contact feeding left hand side | 0,14 - 0,5 mm² | 26 - 20 | 2000 | TN01 016 0003 (1) | TN02 016 0003 (1) |
| | 0,5 - 1,5 mm² | 20 - 16 | 2000 | TN01 016 0002 (1) | TN02 016 0002 (1) |
| Standard | 1,5 - 2,5 mm² | 16 - 14 | 2000 | TN01 016 0005 (1) | TN02 016 0005 (1) |
| High current | 0,5 - 1,5 mm² | 20 - 16 | 2000 | TN01 016 0015 (1) | TN02 016 0015 (1) |
| | 1,5 - 2,5 mm² | 16 - 14 | 2000 | TN01 016 0016 (1) | TN02 016 0016 (1) |
| **Stamped Contacts on reel for hand crimp tools** | | | | | |
| | 0,14 - 0,5 mm² | 26 - 20 | 200 | ZN01 016 0003 (1) | ZN02 016 0003 (1) |
| | 0,5 - 1,5 mm² | 20 - 16 | 200 | ZN01 016 0002 (1) | ZN02 016 0002 (1) |
| Standard | 1,5 - 2,5 mm² | 16 - 14 | 100 | ZN01 016 0005 (1) | ZN02 016 0005 (1) |
| High current | 0,5 - 1,5 mm² | 20 - 16 | 200 | ZN01 016 0015 (1) | ZN02 016 0015 (1) |
| | 1,5 - 2,5 mm² | 16 - 14 | 100 | ZN01 016 0016 (1) | ZN02 016 0016 (1) |
| **Turned crimp contacts** | | | | | |
| Single contact | 0,14 - 0,37 mm² | 26 - 22 | 100 | VN01 016 0024 (1) | VN02 016 0024 (1) |
| | 0,5 mm² | 20 | 100 | VN01 016 0025 (1) | VN02 016 0025 (1) |
| | 0,75 - 1,0 mm² | 20 - 16 | 100 | VN01 016 0026 (1) | VN02 016 0026 (1) |
| | 1,5 mm² | 16 - 15 | 100 | VN01 016 0027 (1) | VN02 016 0027 (1) |
| | 2,5 mm² | 14 | 100 | VN01 016 0028 (1) | VN02 016 0028 (1) |

[1)] For gold plated contacts please refer C146 main catalog or www.amphenol.info

# IP 68 Housings

| General Characteristics | Standard | Value |
|---|---|---|
| Degree of protection housing | IEC 60529 | IP68 |
| Degree of protection cover | IEC 60529 | IP68 |
| Locking System | | 2 screws |
| **Climatical Characteristics** | | |
| Climatic category | IEC 60068 - 1 | 40/100/21 |
| Temperature range | IEC 60068 - 1 | -40°C/+100°C |
| **Materials** | | |
| Housing | | Aluminium die cast alloy |
| Protective cover | | Aluminium die cast alloy |
| Rubber gasket | | Conductive neoprene |
| Locking screws | | Stainless steel |
| Surface | | Special surface |

| | | | | C 146 E 6 pol. C 146 M 2 Module C 146 DD 24 pol. C 146 EE 10 pol. | C 146 E 10 pol. C 146 M 3 Module C 146 DD 42 pol. C 146 EE 18 pol. | C 146 E 16 pol. C 146 E 5 Module C 146 DD 40 pol. C 146 DD 72 pol. C 146 DD 32 pol. | C 146 E 24 pol. C 146 E 7 Module C 146 D 64 pol. C 146 DD 108 pol. C 146 EE 46 pol. |
|---|---|---|---|---|---|---|---|
| | Side entry | M | 25 | C146 68R006 556 8 | | | |
| | Top entry | | | C146 68R006 656 8 | | | |
| | | | | C146 68F006 001 1 | | | |
| | Side entry | M | 32 | | C146 68R010 506 8 | C146 68R016 506 8 | |
| | Top entry | | | | C146 68R010 606 8 | C146 68R016 606 8 | |
| | | | | | C146 68F010 001 1 | C146 68F016 001 1 | |
| | Side entry | M | 40 | | | | C146 68R024 507 8 |
| | Top entry | | | | | | C146 68R024 607 8 |
| | | | | | | | C146 68F024 001 1 |

**Information:** 1) All housings without stud 2) For dimensions please request drawings 3) bulkhead housings with cable outlets available upon request

# IP 65 Housings

| General Characteristics | Standard | Value |
|---|---|---|
| Degree of protection housing | IEC 60529 | IP65 |
| Degree of protection cover | IEC 60529 | IP65 |
| Locking System | | locking lever |
| **Climatical Characteristics** | | |
| Climatic category | IEC 60068-1 | 40/100/21 |
| Temperature range | IEC 60068-1 | -40°C/+100°C |
| **Materials** | | |
| Housing | | Aluminium die cast alloy |
| Protective cover | | Aluminium die cast alloy |
| Rubber gasket | | NBR, CR |
| Locking lever | | steel/zinc coated |

| | | | C 146 E 6 pol.<br>C 146 M 2 Module<br>C 146 DD 24 pol.<br>C 146 EE 10 pol. | L<br>lenght in mm | B<br>width in mm | H<br>height in mm | C 146 E 10 pol.<br>C 146 M 3 Module<br>C 146 DD 42 pol.<br>C 146 HvE 3 pol.<br>C 146 EE 18 pol. | L<br>lenght in mm | B<br>width in mm | H<br>height in mm | C 146 E 16 pol.<br>C 146 M 5 Module<br>C 146 D 40 pol.<br>C 146 DD 72 pol.<br>C 146 HSE 6pol.<br>C 146 EE 32 pol. | L<br>lenght in mm | B<br>width in mm | H<br>height in mm | C 146 E 24 pol.<br>C 146 M 7 Module<br>C 146 D 64 pol.<br>C 146 DD 108 pol.<br>C 146 HvE 10 pol.<br>C 146 EE 46 pol. | L<br>lenght in mm | B<br>width in mm | H<br>height in mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hood, top entry | Low profile | PG | 16 | | | | C146 10G010 600 1 | 73,0 | 43 | 51,0 | | | | | | | | | | |
| | | | 21 | | | | C146 10G010 601 1 | 73,0 | 43 | 51,0 | C146 10G016 600 1 | 93,5 | 43 | 62,0 | C146 10G024 600 1 | 120 | 43 | 62,0 |
| | | | 29 | | | | | | | | C146 10G016 601 1 | 93,5 | 43 | 62,0 | C146 10G024 601 1 | 120 | 43 | 62,0 |
| | | M | 20 | | | | C146 21R010 650 1 | 73,0 | 43 | 51,0 | | | | | | | | |
| | | | 25 | | | | C146 21R010 600 1 | 73,0 | 43 | 51,0 | C146 21R016 650 1 | 93,5 | 43 | 62,0 | C146 21R024 650 1 | 120 | 43 | 62,0 |
| | | | 32 | | | | | | | | C146 21R016 600 1 | 93,5 | 43 | 62,0 | C146 21R024 600 1 | 120 | 43 | 62,0 |
| | High profile | PG | 16 | | | | C146 10G010 650 8 | 73,0 | 43 | 70,0 | | | | | | | | |
| | | | 21 | | | | C146 10G010 600 8 | 73,0 | 43 | 70,0 | C146 10G016 600 8 | 93,5 | 43 | 76,0 | C146 10G024 600 8 | 120 | 43 | 76,0 |
| | | | 29 | | | | C146 10G010 601 8 | 73,0 | 43 | 70,0 | C146 10G016 601 8 | 93,5 | 43 | 76,0 | C146 10G024 601 8 | 120 | 43 | 76,0 |
| | | M | 25 | | | | C146 21R010 650 8 | 73,0 | 43 | 70,0 | C146 21R016 650 8 | 93,5 | 43 | 76,0 | C146 21R024 650 8 | 120 | 43 | 76,0 |
| | | | 32 | | | | C146 21R010 600 8 | 73,0 | 43 | 70,0 | C146 21R016 600 8 | 93,5 | 43 | 76,0 | C146 21R024 600 8 | 120 | 43 | 76,0 |
| | | | 40 | | | | C146 21R010 601 8 | 73,0 | 43 | 70,0 | C146 21R016 601 8 | 93,5 | 43 | 76,0 | C146 21R024 601 8 | 120 | 43 | 76,0 |
| Hood, side entry | Low profile | PG | 16 | | | | C146 10G010 500 1 | 73,0 | 43 | 51,0 | | | | | | | | |
| | | | 21 | | | | C146 10G010 501 1 | 73,0 | 43 | 51,0 | C146 10G016 500 1 | 93,5 | 43 | 62,0 | C146 10G024 500 1 | 120 | 43 | 62,0 |
| | | | 29 | | | | | | | | C146 10G016 501 1 | 93,5 | 43 | 62,0 | C146 10G024 501 1 | 120 | 43 | 62,0 |
| | | M | 20 | | | | C146 21R010 550 1 | 73,0 | 43 | 51,0 | | | | | | | | |
| | | | 25 | | | | C146 21R010 500 1 | 73,0 | 43 | 51,0 | C146 21R016 550 1 | 93,5 | 43 | 62,0 | C146 21R024 550 1 | 120 | 43 | 62,0 |
| | | | 32 | | | | | | | | C146 21R016 500 1 | 93,5 | 43 | 62,0 | C146 21R024 500 1 | 120 | 43 | 62,0 |
| | High profile | PG | 16 | | | | C146 10G010 550 8 | 73,0 | 43 | 70,0 | | | | | | | | |
| | | | 21 | | | | C146 10G010 500 8 | 73,0 | 43 | 70,0 | C146 10G016 500 8 | 93,5 | 43 | 76,0 | C146 10G024 500 8 | 120 | 43 | 76,0 |
| | | | 29 | | | | C146 10G010 501 8 | 73,0 | 43 | 70,0 | C146 10G016 501 8 | 93,5 | 43 | 76,0 | C146 10G024 501 8 | 120 | 43 | 76,0 |
| | | M | 25 | | | | C146 21R010 550 8 | 73,0 | 43 | 70,0 | C146 21R016 550 8 | 93,5 | 43 | 76,0 | C146 21R024 550 8 | 120 | 43 | 76,0 |
| | | | 32 | | | | C146 21R010 500 8 | 73,0 | 43 | 70,0 | C146 21R016 500 8 | 93,5 | 43 | 76,0 | C146 21R024 500 8 | 120 | 43 | 76,0 |
| | | | 40 | | | | | | | | C146 21R016 501 8 | 93,5 | 43 | 76,0 | C146 21R024 501 8 | 120 | 43 | 76,0 |
| Housing, bulkhead mounting | | | | | | | C146 10F010 000 1 | 93,0 | 32 | 28,5 | C146 10F016 000 1 | 113,0 | 32 | 28,5 | C146 10F024 000 1 | 140 | 32 | 28,5 |
| Hood, top entry | Low profile | PG | 13,5 | C146 10G006 600 1 | 60,0 | 43 | 51,0 | | | | | | | | | | | |
| | | | 16 | C146 10G006 601 1 | 60,0 | 43 | 51,0 | C146 10G010 601 1 | 73,0 | 43 | 51,0 | | | | | | | |
| | | | 21 | | | | C146 10G010 607 1 | 73,0 | 43 | 51,0 | C146 10G016 606 1 | 93,5 | 43 | 62,0 | C146 10G024 606 1 | 120 | 43 | 62,0 |
| | | | 29 | | | | | | | | C146 10G016 607 1 | 93,5 | 43 | 62,0 | C146 10G024 607 1 | 120 | 43 | 62,0 |
| | | M | 16 | C146 21R006 656 1 | 60,0 | 43 | 51,0 | | | | | | | | | | | |
| | | | 20 | C146 21R006 606 1 | 60,0 | 43 | 51,0 | C146 21R010 656 1 | 73,0 | 43 | 51,0 | | | | | | | |
| | | | 25 | C146 21R006 607 1 | 60,0 | 43 | 51,0 | C146 21R010 606 1 | 73,0 | 43 | 51,0 | C146 21R016 656 1 | 93,5 | 43 | 62,0 | C146 21R024 656 1 | 120 | 43 | 62,0 |
| | | | 32 | | | | C146 21R010 607 1 | 73,0 | 43 | 51,0 | C146 21R016 606 1 | 93,5 | 43 | 62,0 | C146 21R024 606 1 | 120 | 43 | 62,0 |
| | High profile | PG | 16 | C146 10G006 656 8 | 60,0 | 43 | 70,0 | | | | | | | | | | | |
| | | | 21 | C146 10G006 606 8 | 60,0 | 43 | 70,0 | C146 10G010 606 8 | 73,0 | 43 | 70,0 | C146 10G016 606 8 | 93,5 | 43 | 76,0 | C146 10G024 606 8 | 120 | 43 | 76,0 |
| | | | 29 | C146 10G006 607 8 | 60,0 | 43 | 70,0 | C146 10G010 607 8 | 73,0 | 43 | 70,0 | C146 10G016 607 8 | 93,5 | 43 | 76,0 | C146 10G024 607 8 | 120 | 43 | 76,0 |
| | | M | 25 | C146 21R006 656 8 | 60,0 | 43 | 70,0 | C146 21R010 656 8 | 73,0 | 43 | 70,0 | C146 21R016 656 8 | 93,5 | 43 | 76,0 | C146 21R024 656 8 | 120 | 43 | 76,0 |
| | | | 32 | C146 21R006 606 8 | 60,0 | 43 | 70,0 | C146 21R010 606 8 | 73,0 | 43 | 70,0 | C146 21R016 606 8 | 93,5 | 43 | 76,0 | C146 21R024 606 8 | 120 | 43 | 76,0 |
| | | | 40 | | | | C146 21R010 607 8 | 73,0 | 43 | 70,0 | C146 21R016 607 8 | 93,5 | 43 | 76,0 | C146 21R024 607 8 | 120 | 43 | 76,0 |

**Information:** 1) PG housings with stud 2) Metric housings without stud 3) EMI housings are also available

4) For dimensions and panel cut outs please refer C146 main catalog and www.amphenol.info

5) For bulk head mounting housings with cable outlet, coupling housings and housings with cover please refer C146 main catalog and www.amphenol.info

6) Housings with more than one cable outlet are available upon request

| | | | C 146 E 6 pol.<br>C 146 M 2 Module<br>C 146 DD 24 pol.<br>C 146 EE 10 pol. | L<br>lenght in mm | B<br>width in mm | H<br>height in mm | C 146 E 10 pol.<br>C 146 M 3 Module<br>C 146 DD 42 pol.<br>C 146 HvE 3 pol.<br>C 146 EE 18 pol. | L<br>lenght in mm | B<br>width in mm | H<br>height in mm | C 146 E 16 pol.<br>C 146 M 5 Module<br>C 146 D 40 pol.<br>C 146 DD 72 pol.<br>C 146 HSE 6pol.<br>C 146 EE 32 pol. | L<br>lenght in mm | B<br>width in mm | H<br>height in mm | C 146 E 24 pol.<br>C 146 M 7 Module<br>C 146 D 64 pol.<br>C 146 DD 108 pol.<br>C 146 HvE 10 pol.<br>C 146 EE 46 pol. | L<br>lenght in mm | B<br>width in mm | H<br>height in mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hood, side entry | Low profile | PG 13,5 | C146 10G006 500 1 | 60,0 | 43 | 51,0 | | | | | | | | | | | | | | |
| | | PG 16 | C146 10G006 501 1 | 60,0 | 43 | 51,0 | C146 10G010 506 1 | 73,0 | 43 | 51,0 | | | | | | | | | | |
| | | PG 21 | | | | | C146 10G010 507 1 | 73,0 | 43 | 51,0 | C146 10G016 506 1 | 93,5 | 43 | 62,0 | C146 10G024 506 1 | 120 | 43 | 62,0 |
| | | PG 29 | | | | | | | | | C146 10G016 507 1 | 93,5 | 43 | 62,0 | C146 10G024 507 1 | 120 | 43 | 62,0 |
| | | M 20 | C146 21R006 506 1 | 60,0 | 43 | 51,0 | C146 21R010 556 1 | 73,0 | 43 | 51,0 | | | | | | | | | | |
| | | M 25 | C146 21R006 507 1 | 60,0 | 43 | 51,0 | C146 21R010 506 1 | 73,0 | 43 | 51,0 | C146 21R016 556 1 | 93,5 | 43 | 62,0 | C146 21R024 556 1 | 120 | 43 | 62,0 |
| | | M 32 | | | | | | | | | C146 21R016 506 1 | 93,5 | 43 | 62,0 | C146 21R024 506 1 | 120 | 43 | 62,0 |
| | High profile | PG 16 | C146 10G006 556 8 | 60,0 | 43 | 51,0 | | | | | | | | | | | | | | |
| | | PG 21 | C146 10G006 506 8 | 60,0 | 43 | 51,0 | C146 10G010 506 8 | 73,0 | 43 | 70,0 | C146 10G016 506 8 | 93,5 | 43 | 76,0 | C146 10G024 506 8 | 120 | 43 | 76,0 |
| | | PG 29 | C146 10G006 507 8 | 60,0 | 43 | 51,0 | C146 10G010 507 8 | 73,0 | 43 | 70,0 | C146 10G016 507 8 | 93,5 | 43 | 76,0 | C146 10G024 507 8 | 120 | 43 | 76,0 |
| | | M 25 | C146 21R006 556 8 | 60,0 | 43 | 51,0 | C146 21R010 556 8 | 73,0 | 43 | 70,0 | C146 21R016 556 8 | 93,5 | 43 | 76,0 | C146 21R024 556 8 | 120 | 43 | 76,0 |
| | | M 32 | C146 21R006 506 8 | 60,0 | 43 | 51,0 | C146 21R010 506 8 | 73,0 | 43 | 70,0 | C146 21R016 506 8 | 93,5 | 43 | 76,0 | C146 21R024 506 8 | 120 | 43 | 76,0 |
| | | M 40 | | | | | | | | | C146 21R016 507 8 | 93,5 | 43 | 76,0 | C146 21R024 507 8 | 120 | 43 | 76,0 |
| Housing,bulkhead mounting | | | C146 10F006 000 1 | 80,0 | 43 | 51,0 | C146 10F010 001 1 | 93,0 | 43 | 28,5 | C146 10F016 001 1 | 113,0 | 43 | 28,5 | C146 10F024 001 1 | 140 | 43 | 28,5 |

| | | | C 146 D 7 pol.<br>C 146 A 3/4 pol. | L<br>lenght in mm | B<br>width in mm | H<br>height in mm | | C 146 D 7 pol.<br>C 146 A 3/4 pol. | L<br>lenght in mm | B<br>width in mm | H<br>height in mm |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Hood, top entry | PG | 11 | C146 10G003 600 4 | 26,5 | 33,5 | 50,0 | Housing bulkhead mounting (incl. gasket) | C146 10F003 000 4 (gray) | 40,0 | 28,0 | 22,0 |
| | M | 20 | C146 10R003 600 4 (gray)<br>C146 16R003 600 4 (bl) | 26,5<br>26,5 | 33,5<br>33,5 | 50,0<br>50,0 | | C146 16F003 000 4 (bl) | 40,0 | 28,0 | 22,0 |
| Hood, side entry | PG | 11 | C146 10G003 500 4 | 26,5 | 33,5 | 48,0 | Housing bulkhead end mounting (incl. gasket) | C146 10F003 004 4 | 40,0 | 27,8 | 26,0 |
| | M | 20 | C146 10R003 500 4 (gray)<br>C146 16R003 500 4 (bl) | 26,5<br>26,5 | 33,5<br>33,5 | 48,0<br>48,0 | | | | | |

| | | | C 146 D 15 pol.<br>C 146 A 10 pol. | L<br>lenght in mm | B<br>width in mm | H<br>height in mm | C146 D 25 pol.<br>C146 A 16 pol. | L<br>lenght in mm | B<br>width in mm | H<br>height in mm | | C 146 D 50 pol.<br>C 146 A 32 pol. | L<br>lenght in mm | B<br>width in mm | H<br>height in mm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hood, top entry | Low profile | PG 13,5 | C146 10G010 600 4 | 62,5 | 29,5 | 53,0 | | | | | PG 21 | C146 10G032 600 4 | 82,0 | 56 | 75,0 |
| | | PG 16 | C146 10G010 601 4 | 62,5 | 29,5 | 53,0 | C146 10G016 600 4 | 79,0 | 29,5 | 58,0 | PG 29 | C146 10G032 601 4 | 82,0 | 56 | 75,0 |
| | | M 20 | C146 21R010 650 4 | 62,5 | 29,5 | 53,0 | C146 21R016 650 4 | 79,0 | 29,5 | 58,0 | M 25 | C146 21R032 650 4 | 82,0 | 56 | 75,0 |
| | | M 25 | C146 21R 010 600 4 | 62,5 | 29,5 | 53,0 | C146 21R016 600 4 | 79,0 | 29,5 | 58,0 | | | | | |
| | High profile | PG 16 | C146 10G015 601 2 | 62,5 | 29,5 | 64,5 | C146 10G025 601 2 | 79,0 | 29,5 | 70,5 | M 32 | C146 21R032 600 4 | 82,0 | 56 | 75,0 |
| | | PG 21 | C146 10G015 600 2 | 62,5 | 29,5 | 64,5 | C146 10G025 600 2 | 79,0 | 29,5 | 70,5 | | | | | |
| | | M 20 | C146 21R015 650 2 | 62,5 | 29,5 | 64,5 | C146 21R025 650 2 | 79,0 | 29,5 | 70,5 | M 40 | C146 21R032 601 4 | 82,0 | 56 | 75,0 |
| | | M 25 | C146 21R015 600 2 | 62,5 | 29,5 | 64,5 | C146 21R025 600 2 | 79,0 | 29,5 | 70,5 | | | | | |
| Hood, side entry | Low profile | PG 13,5 | C146 10G010 501 4 | 62,5 | 29,5 | 53,0 | C146 10G016 501 4 | 79,0 | 29,5 | 58,0 | PG 21 | C146 10G032 500 4 | 82,0 | 56 | 75,0 |
| | | PG 16 | C146 10G010 500 4 | 62,5 | 29,5 | 53,0 | C146 10G016 500 4 | 79,0 | 29,5 | 58,0 | PG 29 | C146 10G032 501 4 | 82,0 | 56 | 75,0 |
| | | M 20 | C146 21R010 550 4 | 62,5 | 29,5 | 53,0 | C146 21R016 550 4 | 79,0 | 29,5 | 58,0 | M 25 | C146 21R032 550 4 | 82,0 | 56 | 75,0 |
| | | M 25 | C146 21R010 500 4 | 62,5 | 29,5 | 53,0 | C146 21R016 500 4 | 79,0 | 29,5 | 58,0 | | | | | |
| | High profile | PG 16 | C146 10G015 501 2 | 62,5 | 29,5 | 64,5 | C146 10G025 501 2 | 79,0 | 29,5 | 70,5 | M 32 | C146 21R032 500 4 | 82,0 | 56 | 75,0 |
| | | PG 21 | C146 10G015 500 2 | 62,5 | 29,5 | 64,5 | C146 10G025 500 2 | 79,0 | 29,5 | 70,5 | | | | | |
| | | M 20 | C146 21R015 550 2 | 62,5 | 29,5 | 64,5 | C146 21R015 550 2 | 79,0 | 29,5 | 70,5 | M 40 | C146 21R032 501 4 | 82,0 | 56 | 75,0 |
| | | M 25 | C146 21R015 500 2 | 62,5 | 29,5 | 64,5 | C146 21R015 500 2 | 79,0 | 29,5 | 70,5 | | | | | |
| Housing, bulkhead mounting | | | C146 10F015 000 2 | 81,0 | 29,5 | 26,0 | C146 10F025 000 2 | 96,0 | 29,5 | 26,0 | | C146 10F032 000 4 | 102,0 | 57 | 26,0 |
| | | | | | | | | | | | | C146 10F032 000 4 | 102,0 | 57 | 26,0 |

**Information:** 1) PG housings with stud 2) Metric housings without stud 3) EMI housings are also available
4) For dimensions and panel cut outs please refer C146 main catalog and www.amphenol.info
5) For bulk head mounting housings with cable outlet, coupling housings and housings with cover please refer C146 main catalog and www.amphenol.info
6) Housings with more than one cable outlet are available upon request

# Kits C146 E

**Screw Termination**

**Kits consist of insert with contacts, housing and gland bushing for housings with cable outlet**

| No. of Pos. | PG | Part No. | Component parts | Cable entry | Hood profile | Spring cover |
|---|---|---|---|---|---|---|
| 6 POL | 16 | C146 10E006 943 1 | C146 10G006 501 1<br>C146 10A006 102 1<br>VN16 160 0014 | side | low | |
| | | C146 10E006 944 1 | C146 10G006 601 1<br>C146 10A006 102 1<br>VN16 160 0014 | top | low | |
| | 21 | C146 10E006 945 8 | C146 10G006 506 8<br>C146 10A006 102 1<br>VN16 160 0014 | side | high | |
| | | C146 10E006 946 8 | C146 10G006 606 8<br>C146 10A006 102 1<br>VN16 160 0014 | top | high | |
| | panel | C146 10E006 940 1 | C146 10F006 000 1<br>C146 10B006 102 1 | | | no |
| | | C146 10E006 942 1 | C146 10F006 003 1<br>C146 10B006 102 1 | | | yes |
| 10 POL | 21 | C146 10E010 943 1 | C146 10G010 506 1<br>C146 10A010 102 1<br>VN16 160 0014 | side | low | |
| | | C146 10E010 944 1 | C146 10G010 606 1<br>C146 10A010 102 1<br>VN16 160 0014 | top | low | |
| | | C146 10E010 945 1 | C146 10G010 607 1<br>C146 10A010 102 1<br>VN16 160 0014 | top | low | |
| | | C146 10E010 946 1 | C146 10G010 507 1<br>C146 10A010 102 1<br>VN16 160 0014 | side | low | |
| | panel | C146 10E010 941 1 | C146 10F010 001 1<br>C146 10B010 102 1 | | | no |
| | | C146 10E010 942 1 | C146 10F010 003 1<br>C146 10B010 102 1 | | | yes |
| 16 POL | 21 | C146 10E016 943 1 | C146 10G016 506 1<br>C146 10A016 102 1<br>VN16 160 0014 | side | low | |
| | | C146 10E016 944 1 | C146 10G016 606 1<br>C146 10A016 102 1<br>VN16 160 0014 | top | low | |
| | panel | C146 10E016 941 1 | C146 10F016 001 1<br>C146 10B016 102 1 | | | no |
| | | C146 10E016 942 1 | C146 10F016 003 1<br>C146 10B016 102 1 | | | yes |

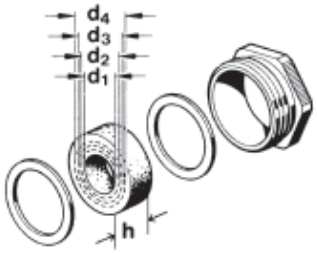
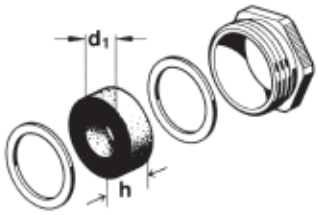
# Kits C146 E

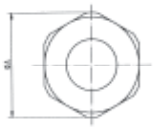
**Screw Termination**

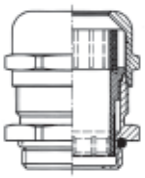
**Kits consist of insert with contacts, housing and gland bushing for housings with cable outlet**

| No. of Pos. | PG | Part No. | Component parts | Cable entry | Hood profile | Spring cover |
|---|---|---|---|---|---|---|
| 24 POL | 21 | C146 10E024 943 8 | C146 10G024 500 8<br>C146 10A024 102 1<br>VN16 210 0014 | side | high | |
| | | C146 10E024 944 8 | C146 10G024 600 8<br>C146 10A024 102 1<br>VN16 210 0014 | top | high | |
| | | C146 10E024 945 1 | C146 10G024 500 1<br>C146 10A024 102 1<br>VN16 210 0014 | side | low | |
| | | C146 10E024 946 1 | C146 10G024 600 1<br>C146 10A024 102 1<br>VN16 210 0014 | top | low | |
| | | C146 10E024 947 8 | C146 10G024 506 8<br>C146 10A024 102 1<br>VN16 210 0014 | side | high | |
| | | C146 10E024 948 8 | C146 10G024 606 8<br>C146 10A024 102 1<br>VN16 210 0014 | top | high | |
| | | C146 10E024 949 1 | C146 10G024 506 1<br>C146 10A024 102 1<br>VN16 210 0014 | side | low | |
| | | C146 10E024 950 1 | C146 10G024 606 1<br>C146 10A024 102 1<br>VN16 210 0014 | top | low | |
| | 29 | C146 10E024 951 8 | C146 10G024 501 8<br>C146 10A024 102 1<br>VN16 210 0014 | side | high | |
| | | C146 10E024 952 8 | C146 10G024 601 8<br>C146 10A024 102 1<br>VN16 210 0014 | top | high | |
| | | C146 10E024 953 1 | C146 10G024 501 1<br>C146 10A024 102 1<br>VN16 210 0014 | side | low | |
| | | C146 10E024 954 1 | C146 10G024 601 1<br>C146 10A024 102 1<br>VN16 210 0014 | top | low | |
| | | C146 10E024 955 1 | C146 10G024 507 1<br>C146 10A024 102 1<br>VN16 210 0014 | side | low | |
| | | C146 10E024 956 8 | C146 10G024 507 8<br>C146 10A024 102 1<br>VN16 210 0014 | side | high | |
| | | C146 10E024 957 8 | C146 10G024 607 8<br>C146 10A024 102 1<br>VN16 210 0014 | top | high | |
| | | C146 10E024 958 1 | C146 10G024 607 1<br>C146 10A024 102 1<br>VN16 210 0014 | top | low | |
| | panel | C146 10E024 940 1 | C146 10F024 000 1<br>C146 10B024 102 1 | | | no |
| | | C146 10E024 941 1 | C146 10F024 001 1<br>C146 10B024 102 1 | | | no |
| | | C146 10E024 942 1 | C146 10F024 003 1<br>C146 10B024 102 1 | | | yes |

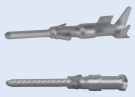
# Gland bushings

| Gland bushings IP 65 | Drawing | PG | M | Pieces | Part No. |
|---|---|---|---|---|---|
| Metal, with variable inner diameter |   | 11 | | 10 | VN16 110 0014 X (Thermoplast) |
| | | | 20 | 10 | VN16 200 0114 X (Thermoplast) |
| | | 13,5 | | 10 | VN16 135 0014 X |
| | | 16 | | 10 | VN16 160 0014 X |
| | | | 20 | 10 | VN16 200 0114 X |
| | | 21 | | 10 | VN16 210 0014 X |
| | | | 25 | 10 | VN16 250 0114 X |
| | | 29 | | 10 | VN16 290 0014 X |
| | | | 32 | 10 | VN16 320 0114 X |
| | | 36 | | 10 | VN16 360 0014 X |
| | | | 40 | 10 | VN16 400 0114 X |
| | | 42 | | 10 | VN16 420 0014 X |
| | | | 50 | 10 | VN16 500 0114 X |
| Metal, with standard diameter |   | 11 | | 10 | VN16 110 0013 X (Thermoplast) |
| | | 13,5 | | 10 | VN16 135 0013 X |
| | | 16 | | 10 | VN16 160 0013 X |
| | | 21 | | 10 | VN16 210 0013 X |
| | | 29 | | 10 | VN16 290 0013 X |
| | | 36 | | 10 | VN16 360 0013 X |
| | | 42 | | 10 | VN16 420 0013 X |

| Gland bushing with vibration protection IP 67 | Clamping range Ø | A (mm) | PG | M | Pieces | Part No. |
|---|---|---|---|---|---|---|
|  | 4 - 10 mm | 24,4 | 11 | | 10 | VN16 110 0027 X |
| | 4 - 10 mm | 20 | | 16 | 10 | VN16 160 0127 X |
| | 5 - 12 mm | 26,5 | 13,5 | | 10 | VN16 135 0027 X |
| | 6 - 12 mm | 24 | | 20 | 10 | VN16 200 0127 X |
| | 9 - 14 mm | 29,5 | 16 | | 10 | VN16 160 0027 X |
| | 9 - 16 mm | 28 | | 25 | 10 | VN16 250 0127 X |
| | 13 - 18 mm | 36,2 | 21 | | 10 | VN16 210 0027 X |
| | 10 - 21 mm | 36 | | 32 | 10 | VN16 320 0127 X |
| | 14 - 25 mm | 43,6 | 29 | | 10 | VN16 290 0027 X |
| | 16 - 28 mm | 46 | | 40 | 10 | VN16 400 0127 X |

| Gland bushing EMC IP 68 | Clamping range Ø | PG | M | Pieces | Part No. |
|---|---|---|---|---|---|
|  | 4 - 10 mm | 11 | | 10 | VN16 110 0026 X |
| | 5,5 - 10 mm | | 16 | 10 | VN16 160 0126 X |
| | 5 - 12 mm | 13,5 | | 10 | VN16 135 0026 X |
| | 8 - 13 mm | | 20 | 10 | VN16 200 0126 X |
| | 8 - 14 mm | 16 | | 10 | VN16 160 0026 X |
| | 11 - 18 mm | | 25 | 10 | VN16 250 0126 X |
| | 11 - 17,5 mm | 21 | | 10 | VN16 210 0026 X |
| | 15 - 21 mm | | 32 | 10 | VN16 320 0126 X |
| | 16 - 25 mm | 29 | | 10 | VN16 290 0026 X |
| | 19 - 27 mm | | 40 | 10 | VN16 400 0126 X |

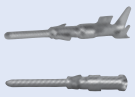
# Crimping tools for stamped contacts

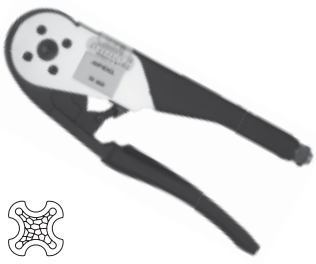


| Description | for wire gauge | Part No. Contact locator | Crimping dies | Tools |
|---|---|---|---|---|
| Removal tool for contacts<br> | – | – | – | FG 0300 146 1 |
| Service crimping tool<br>Crimping fool for single contacts<br> | 0,14 - 0,5 mm²<br>0,5 - 1,5 mm² | – | – | TA 0100 146 |
| | 0,14 - 0,5 mm²<br>0,5 - 1,5 mm²<br>1,5 - 2,5 mm² | TA 0001 146 000 1<br>TA 0002 146 000 1<br>TA 0007 146 000 3 | TA 0000 202<br>TA 0000 163<br>TA 0000 141 | TA 0000<br>TA 0500 |

[1] Further information see catalogue „Tools“

# Hand crimping tool for turned contacts



| Description | Contact Ø | for wire gauge | Part No. |
|---|---|---|---|
| incl. contact locator and calibration pin<br> | 1,0 mm | 0,10 - 0,5 mm² | TB 0300 146 |
| | 1,6 mm | 0,14 - 2,5 mm² | TB 0400 146 |
| | 2,5 mm (wiht clip) | 0,5 - 4 mm² | TB 0100 146 |
| | 2,5 mm (wihtout clip) | 0,5 - 4 mm² | TB 0600 146 |
| | 3,6 mm (wiht clip) | 1,5 - 10 mm² | TB 0200 146 |
| | 3,6 mm (wihtout clip) | 1,5 - 10 mm² | TB 0100 148 |
| 4-Indent hand crimping tool for turned contacts<br>  | 1,6 mm LWL | | TB 0500 146 |

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