

BMS series

- Coupling: Bayonet
- Terminal: Crimp

Connector



Index

| | |
|--|-------|
| Profile, Technical Data | 2 |
| Part Number Explanation | 3-15 |
| Contacts | 3 |
| Receptacle① (Panel Mounted, No Protective Enclosure) | 4 |
| Receptacle② (Protective Enclosure, Clamp/Gland) | 5 |
| Receptacle③ (Free) | 6 |
| Receptacle④ (Adapter) | 7 |
| Plug | 8 |
| Shell Size-Arrangement No. | 9-15 |
| Angular Displacement of Insert | 16 |
| Size of Receptacle & Plug | 17-25 |
| Receptacle① (Panel Mounted, No Protective Enclosure) | 17 |
| Receptacle② (Protective Enclosure, Clamp/Gland) | 18-19 |
| Receptacle Mounting & Mounting Hole | 20 |
| Receptacle③ (Free) | 21 |
| Receptacle④ (Adapter) | 22 |
| Plug | 23-25 |
| Cap | 26 |
| Mounting Plate & Gasket | 27 |
| Assemble Parts | 28 |
| Crimp, Insertion & Extraction | 29 |
| Tools | 30 |



High-tech Enterprise Certificate



Foreign Invested Advanced



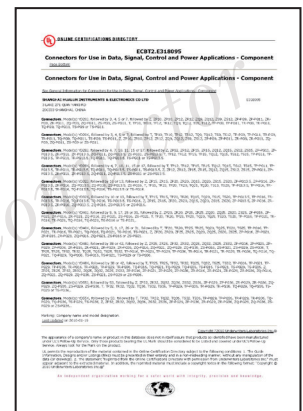
Enterprise Credit Rating AAA



Software Copyright



ISO9001, ISO14001, ISO45001



UL for YD series



TUV SUD



ISO9001 ISO14001 ISO45001

Profile

- ◆ Design according to MIL5015, VG95234, interchangeable with equivalent products.
- ◆ Insert: Halogen free & fire resistance thermoplastic UL94V-0; 2-60 pins. More than 50 types.
- ◆ Shell size-arrangement: 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36, 40.
- ◆ Coupling: bayonet
- ◆ Terminal: crimp
- ◆ Tools: hand crimp tool-M22520/1-01. Pneumatic crimp tool would be update efficiency and fit for mass crimping.
- ◆ Shell Protection degree: IP65/67
- ◆ Shock vibration: Class 1B (GB/T21563-2018 Shock and vibration test of rail transit locomotive and rolling stock equipment)
- ◆ Technical data qualified to NFF61030 (Normes francaises) & GB/T34119-2017 (Railway rolling stock-Electrical connectors) .
- ◆ Shell color: Black, Army Green
- ◆ TUV certification.

Hualun connectors are appointed by Chinese rail transport, engineering machinery, power electric power, thermoplastic machinery, industrial automation, and robot manufacturing enterprises. as a perennial supporting product.

Technical Data

Environmental

| | |
|-----------------------|--|
| Operating Temperature | Upper limit+125°C * Lower limit-55°C |
| Relative Humidity | 40°C±2°C 93%~95% |
| Salty Spray Corrosion | ≥96hours |
| Protection Degree | IP65,IP67 (when mated,wired and mounted according to DS) |
| Shock Vibration | Class 1B (GB/T21563-2018 / IEC61373: 2010) |

Note: * The upper limit temperature is the maximum internal hot spot temperature that occurs in either combination of electrical load and environmental conditions.

Contact current De-rating

| | | | | | |
|-----------------|------|-------|-------|-------|-------|
| Qty of contacts | 1~10 | 11~20 | 21~30 | 31~50 | 51~80 |
| Drop rate% | 0 | 10 | 20 | 30 | 40 |

Mechanical Features

| | | | |
|--------------------------|-------|-------|-------|
| Type of contacts# | ● 16# | ⊕ 12# | ⊗ 8# |
| retention force (min) | 70N | 90N | 110N |
| Minimum separation force | 0.56N | 0.83N | 1.39N |

| The contact crimp is sufficient to match the tensile strength of the cable | | |
|--|-----------------|------------------|
| Wire Gauge | | Tensile Strength |
| AWG | mm ² | N |
| 20 | 0.5 | 60 |
| - | 0.75 | 85 |
| 18 | 0.82 | 90 |
| - | 1.0 | 108 |
| 16 | 1.3 | 135 |
| - | 1.5 | 150 |
| 14 | 2.1 | 200 |
| - | 2.5 | 230 |
| 12 | 3.3 | 275 |
| - | 4.0 | 310 |
| 10 | 5.3 | 355 |
| - | 6.0 | 360 |
| 8 | 8.4 | 370 |
| Mechanical Life | ≥ 500 | |

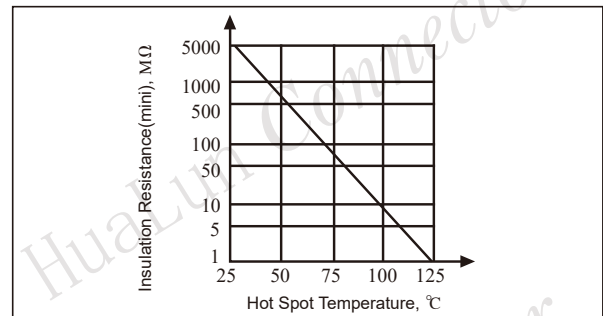
Testing Condition

| | | |
|------------------------|----------------------------|------------------------------------|
| Temperature: 15°C~35°C | Relative Humidity: 20%~80% | Atmospheric Pressure: 73KPa~106KPa |
|------------------------|----------------------------|------------------------------------|

Electric Features

| | | | | |
|------------------------------|--|---------|---------|---------|
| Service rating | Inst. | A | D | E |
| Rated Voltage | 250VDC | 700VDC | 1250VDC | 1750VDC |
| | 200VAC | 500VAC | 900VAC | 1250VAC |
| Dielectric Withstand Voltage | 1000VAC | 2000VAC | 2800VAC | 3500VAC |
| Mechanical Spacing | - | 1.59mm | 3.18mm | 4.76mm |
| Creepage Distance | 1.59mm | 3.18mm | 4.76mm | 6.35mm |
| Insulation Resistance | Normal: >5000MΩ, (Dynamic values see tableA) | | | |
| Type of contacts# | ● 16# | ⊕ 12# | ⊗ 8# | |
| Working Current | 13A | 23A | 46A | |
| Contact Resistance | 2.5mΩ | 1.3mΩ | 0.7mΩ | |

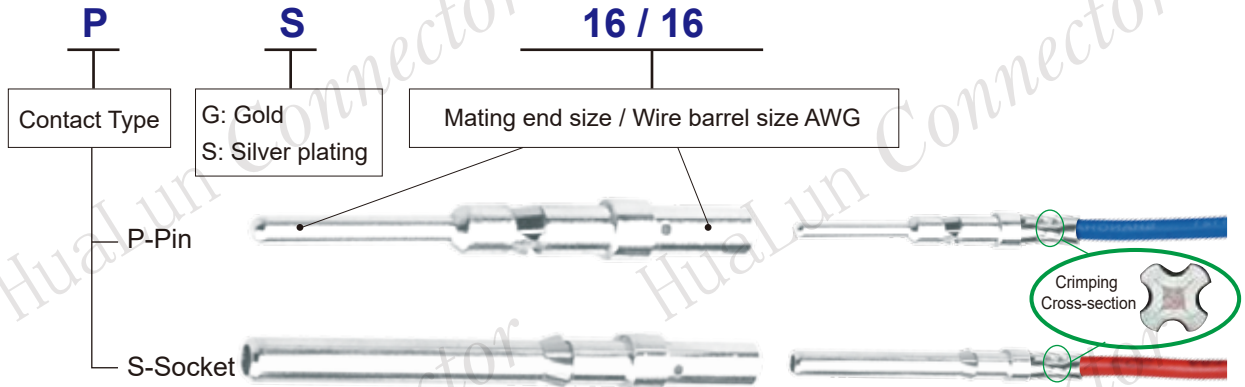
TableA The limit value of insulation resistance varies with temperature



Material of Main Parts

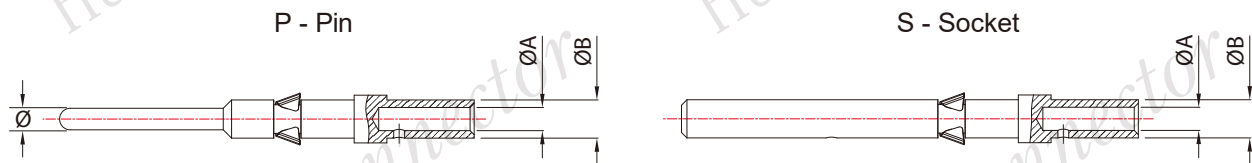
| | | |
|-------------------|------------------------|---|
| Shell | Material | Aluminum Alloy |
| | Finish | Electrophoretic Paint; Zinc Passivation |
| Insert | Material | Halogen free & fire resistance thermoplastic material |
| | Flame Retardant Grade | UL94V-0 |
| Contacts | Material | Copper Alloy |
| | Plating | Silver; Gold |
| Grommet & Bushing | Low Fire Hazard Rubber | |

Contact Part Number



Example: PS16/20 Order socket, silver plating, mating end size is #16, wire barrel size is 20AWG

SS16/16 Order pin, silver plating, mating end size is #16, wire barrel size is 16AWG



Contact Size & Wire Size

| Contact Spec# Size of plug-in end Ømm | Code | Ø A(mm) | Ø B(mm) | Contact Adapter Wire | |
|--|---------------|---------|---------|-----------------------|---|
| | | | | Wire Barrel Size(AWG) | Conductor (the metric system) mm ² |
| ● 16# Ø1.588 ±0.025 | 16S/20 | Ø1.10 | Ø2.40 | 20 | < 0.50 |
| | 16S/16 | Ø1.70 | Ø2.80 | 16 | < 1.25 |
| | 16/20 | Ø1.10 | Ø2.40 | 20 | < 0.50 |
| | 16/18 | Ø1.30 | Ø2.30 | 18 | < 0.80 |
| | 16/16 | Ø1.70 | Ø2.80 | 16 | < 1.25 |
| | 16/14 | Ø2.00 | Ø3.20 | 14 | < 2.00 |
| ⊕ 12# Ø2.39 ± 0.03 | 12/16 | Ø1.70 | Ø2.80 | 16 | < 1.25 |
| | 12/14 | Ø2.00 | Ø3.20 | 14 | < 2.00 |
| | 12/12 | Ø2.50 | Ø3.80 | 12 | < 3.15 |
| ⊗ 8# Ø3.61 ± 0.03 | 8/12 | Ø2.50 | Ø3.80 | 12 | < 3.15 |
| | 8/10 | Ø3.50 | Ø4.40 | 10 | < 5.50 |
| | 8/8 | Ø4.50 | Ø6.70 | 8 | < 8.00 |

Note: The length of the pin & socket of type 16S is special (short), and the specifications need to be noted when ordered separately.

Part Number (Explanation)

Receptacle ①

(Panel Mounted)
(No Protective Enclosure)

e.g. ① BMS 34 02 S16~9 N

e.g. ② BMS 34 22 P16~9 W L

① ② ③ ④ ⑤ ⑥

Explanation

① **BMS**: Coupling (bayonet)

② **34**: Terminal (crimp)

③ **02**: Front Mounting
22: Rear Mounting

{ panel mounted,
No protective enclosure

④ Insert:

S(P) 16 - 9

S: Socket
P: Pin

Shell-size

Arrangement No.

Insert P/N: See Page 9-15

⑤ Insert Orientation:

N: Cardinal Points; (Default)

W, X, Y, Z, See Page 16

⑥ Shell Color:

◆ **H**: Black

◆ **L**: Army Green

■ Shell Size See Page 17



Part Number (Explanation)

Receptacle ② (Protective Enclosure)
(Clamp/Gland)

| | | | | | | | |
|--------|------------|-----------|-----------|--------------|----------|------------|----------|
| e.g. ① | BMS | 34 | 20 | S16-9 | N | 16A | |
| e.g. ② | BMS | 34 | 00 | P16-9 | Y | 16A | L |
| | ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ |

Explanation

① **BMS** : Coupling (bayonet)

② **34** : Terminal (crimp)

③ **00** : Front Mounting
20 : Rear Mounting

Protective Enclosure,
Clamp/Gland

④ Insert:

S(P) 16 - 9

S: Socket
P: Pin

Shell-size Arrangement No.

Insert P/N: See Page 9-15

⑤ Insert Orientation:

N: Cardinal Points; (Default)

W, X, Y, Z, See Page 16

⑥ Outlet Type:

◆ ****A** : Cable Clamp (3057+3420)
size

◆ **PG**** : PG Nylon Cable Gland Outlet
size

⑦ Shell Color:

◆ **H**: Black

◆ **L**: Army Green

■ Shell Size See
Page 18~20



Part Number (Explanation)

Receptacle ③

(Free)

e.g. **1** BMS 34 01 S16-9 N 16A

e.g. **2** BMS 34 01 P16-9 Y PG13.5 L

①

②

③

④

⑤

⑥

⑦

■ Shell Size See Page 21

Explanation

① **BMS** : Coupling (bayonet)

② **34** : Terminal (crimp)

③ **01** : Free Receptacle

④ Insert:

S(P) 16 - 9

S: Socket
P: Pin

Shell-size Arrangement No.

Insert P/N: See Page 9-15

⑤ Insert Orientation:

N: Cardinal Points; (Default)

W, X, Y, Z, See Page 16

⑥ Outlet Type:

◆ ****A** : Cable Clamp (3057+3420)
size

◆ **PG **** : PG Nylon Cable Gland Outlet
size

⑦ Shell Color:

◆ **H**: Black

◆ **L**: Army Green



Part Number (Explanation)

Receptacle ④ (Adapter)

e.g. ① **BMS** ② **34** ③ **022** ④ **S16-9P** ⑤ **N**

e.g. ① **BMS** ② **34** ③ **011** ④ **P16-9S** ⑤ **W** ⑥ **L**

Explanation

① **BMS** : Coupling (bayonet)

② **34** : Terminal (crimp)

③ **022** : Adapter (Square flange)

011 : Adapter (Round flange)

④ Insert:

S 16 - 9 P

S: Socket Shell-size Arrangement P: Pin
P: Pin No. S: Socket

Insert P/N: See [Page 9-15](#)

⑤ Insert Orientation:

N: Cardinal Points; (Default)

W, X, Y, Z, See [Page 16](#)

⑥ Shell Color:

◆ **H**: Black

◆ **L**: Army Green

■ Shell Size See [Page 22](#)





TUV SUD



ISO9001

ISO14001

ISO45001



华伦连接器
HuaLun Connector

Part Number (Explanation)

Plug

e.g. **1** BMS 34 06 S16-9 N 16A

e.g. **2** BMS 34 08 P16-9 Y PG13.5 L

1
 2
 3
 4
 5
 6
 7

Explanation

1 BMS : Coupling (bayonet)

2 34 : Terminal (crimp)

3 06 : Straight { Protective Enclosure,
08 : 90° Angled { Clamp/Gland

4 Insert:

S (P) 16 - 9

S: Socket
P: Pin

Shell-size

Arrangement No.

Insert P/N: See Page 9-15

5 Insert Orientation:

N: Cardinal Points; (Default)

W, X, Y, Z, See Page 16

6 Outlet Type:

◆ ****A** : Cable Clamp (3057+3420)
size

◆ **PG**** : PG Nylon Cable Gland
size

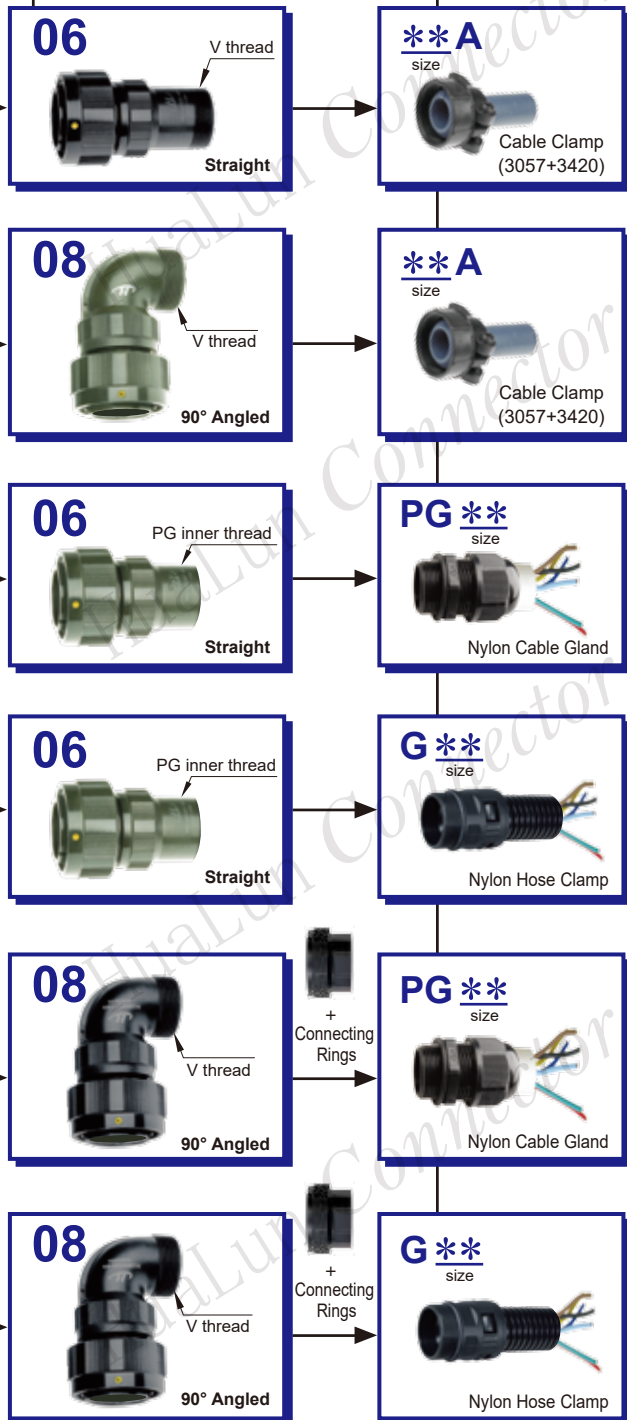
◆ **G**** : G Nylon Hose Clamp
size

7 Shell Color:

◆ **H**: Black

◆ **L**: Army Green

■ Shell Size See Page 23~25



Shell Size - Arrangement No.

View from mating face

● 16# ⊕ 12#

| Shell/Insulator | Size 14S | | | | | | | | | |
|--|---------------|--------|---------------|--------|---------------|--------|---------------|--------|---------------|--------|
| P S Shell Size- Arrangement No. | P14S-2 | S14S-2 | P14S-5 | S14S-5 | P14S-6 | S14S-6 | P14S-7 | S14S-7 | P14S-9 | S14S-9 |
| Contact Arrangement | 4 Contact | | 5 Contact | | 6 Contact | | 3 Contact | | 2 Contact | |
| Contact Size×Contact Qty. | 16#×4 | | 16#×5 | | 16#×6 | | 16#×3 | | 16#×2 | |
| Service Rating | Inst. | | Inst. | | Inst. | | A | | A | |

View from mating face

| Shell/Insulator | Size 16S | | | | | | | |
|--|---------------|--------|---------------|--------|---------------|--------|---------------|--------|
| P S Shell Size- Arrangement No. | P16S-1 | S16S-1 | P16S-4 | S16S-4 | P16S-5 | S16S-5 | P16S-8 | S16S-8 |
| Contact Arrangement | 7 Contact | | 2 Contact | | 3 Contact | | 5 Contact | |
| Contact Size×Contact Qty. | 16#×7 | | 16#×2 | | 16#×3 | | 16#×5 | |
| Service Rating | A | | D | | A | | A | |

View from mating face

| Shell/Insulator | Size 16 | | | | Size 18 | | | |
|--|---------------|-------|---------------|--------|---------------|--------|---------------|--------|
| P S Shell Size- Arrangement No. | P16-9 | S16-9 | P16-10 | S16-10 | P18-11 | S18-11 | P18-12 | S18-12 |
| Contact Arrangement | 4 Contact | | 3 Contact | | 5 Contact | | 6 Contact | |
| Contact Size×Contact Qty. | 16#×2 | 12#×2 | 12#×3 | | 12#×5 | | 16#×6 | |
| Service Rating | A | | A | | A | | A | |

Shell Size - Arrangement No.

View from mating face

● 16# ⊕ 12# ⊗ 8#

| Shell/Insulator | Size 18 | | | | Size 20 | | | |
|--|---------------|---------------|---------------|---------------|--------------|--------------|--------------------------|--------------|
| Shell Size-Arrangement No. P S | P18-19 | S18-19 | P18-22 | S18-22 | P20-4 | S20-4 | P20-7 | S20-7 |
| Contact Arrangement | | | | | | | | |
| Contact Size×Contact Qty. | 16#×10 | | 16#×3 | | 12#×4 | | 16#×8 | |
| Service Rating | A | | D | | D | | A,B,G,H = D Other = A | |

View from mating face

| Shell/Insulator | Size 20 | | | | | |
|--|---------------|---------------|---------------|---------------|---------------|---------------|
| Shell Size-Arrangement No. P S | P20-15 | S20-15 | P20-29 | S20-29 | P20-33 | S20-33 |
| Contact Arrangement | | | | | | |
| Contact Size×Contact Qty. | 12#×7 | | 16#×17 | | 16#×11 | |
| Service Rating | A | | A | | A | |

View from mating face

| Shell/Insulator | Size 22 | | | | | |
|--|--------------|--------------|----------------|--------------|--------------|--------------|
| Shell Size-Arrangement No. P S | P22-2 | S22-2 | P22-5 | S22-5 | P22-8 | S22-8 |
| Contact Arrangement | | | | | | |
| Contact Size×Contact Qty. | 8#×3 | | 16#×4 12#×2 | | 12#×2 | |
| Service Rating | D | | D | | E | |

Shell Size - Arrangement No.

View from mating face

● 16# ⊕ 12# ⊗ 8#

| Shell/Insulator | Size 22 | | | | | |
|---------------------------------------|---------|--------|------------------------|--------|--------|--------|
| P Shell Size- S Arrangement No. | P22-14 | S22-14 | P22-18 | S22-18 | P22-19 | S22-19 |
| Contact Arrangement | | | | | | |
| Contact Size×Contact Qty. | 16#×19 | | 16#×8 | | 16#×14 | |
| Service Rating | A | | C,D,E = A Other = D | | A | |

View from mating face

| Shell/Insulator | Size 22 | | | | Size 24 | |
|---------------------------------------|---------|--------|--------------------|--------|---------|-------|
| P Shell Size- S Arrangement No. | P22-20 | S22-20 | P22-23 | S22-23 | P24-2 | S24-2 |
| Contact Arrangement | | | | | | |
| Contact Size×Contact Qty. | 16#×19 | | 12#×8 | | 12#×7 | |
| Service Rating | A | | H = D Other = A | | D | |

View from mating face

| Shell/Insulator | Size 24 | | | | | |
|---------------------------------------|---------|-------|--------|--------|--------|--------|
| P Shell Size- S Arrangement No. | P24-5 | S24-5 | P24-10 | S24-10 | P24-11 | S24-11 |
| Contact Arrangement | | | | | | |
| Contact Size×Contact Qty. | 16#×16 | | 8#×7 | | 12#×6 | |
| Service Rating | A | | A | | A | |



TUV SUD



ISO9001 ISO14001 ISO45001

Shell Size - Arrangement No.

View from mating face

● 16# ⊕ 12# ⊗ 8#

| Shell/Insulator | Size 24 | | Size 28 | | | |
|---|------------------|---------------|-------------------|---------------|-------------------|---------------|
| P Shell Size- S Arrangement No. | P24-22 | S24-22 | P28-11 | S28-11 | P28-12 | S28-12 |
| Contact Arrangement | <p>4 Contact</p> | | <p>22 Contact</p> | | <p>26 Contact</p> | |
| Contact Size×Contact Qty. | 8#×4 | | 16#×18 | 12#×4 | 16#×26 | |
| Service Rating | D | | A | | A | |

View from mating face

| Shell/Insulator | Size 28 | | | |
|---|-------------------|---------------|-------------------|---------------|
| P Shell Size- S Arrangement No. | P28-16 | S28-16 | P28-21 | S28-21 |
| Contact Arrangement | <p>20 Contact</p> | | <p>37 Contact</p> | |
| Contact Size×Contact Qty. | 16#×20 | | 16#×37 | |
| Service Rating | A | | A | |

View from mating face

| Shell/Insulator | Size 32 | | | |
|---|-------------------|---------------|-------------------|----------------|
| P Shell Size- S Arrangement No. | P32-13 | S32-13 | P32-A13 | S32-A13 |
| Contact Arrangement | <p>23 Contact</p> | | <p>13 Contact</p> | |
| Contact Size×Contact Qty. | 16#×18 | 12#×5 | 12#×13 | |
| Service Rating | D | | D | |

Shell Size - Arrangement No.

View from mating face

● 16# ⊕ 12#

| Shell/Insulator | Size 32 | | | |
|-------------------------------|---------------------|------------------------|---------------------|------------------------|
| P Shell Size- Arrangement No. | P32-22 | S32-22 | P32-73 | S32-73 |
| Contact Arrangement | <p>Pin P</p> | <p>S Socket</p> | <p>Pin P</p> | <p>S Socket</p> |
| Contact Size×Contact Qty. | 16#×54 | | 16#×46 | |
| Service Rating | A | | A | |

View from mating face

| Shell/Insulator | Size 36 | | | |
|-------------------------------|---------------------|------------------------|---------------------|------------------------|
| P Shell Size- Arrangement No. | P36-10 | S36-10 | P36-A22 | S36-A22 |
| Contact Arrangement | <p>Pin P</p> | <p>S Socket</p> | <p>Pin P</p> | <p>S Socket</p> |
| Contact Size×Contact Qty. | 16#×48 | | 12#×22 | |
| Service Rating | A | | D | |

View from mating face

| Shell/Insulator | Size 36 | | | |
|-------------------------------|---------------------|------------------------|---------------------|------------------------|
| P Shell Size- Arrangement No. | P36-52 | S36-52 | P36-66 | S36-66 |
| Contact Arrangement | <p>Pin P</p> | <p>S Socket</p> | <p>Pin P</p> | <p>S Socket</p> |
| Contact Size×Contact Qty. | 16#×52 | | 16#×52 | 12#×4 |
| Service Rating | A | | A | |

Shell Size - Arrangement No.

View from mating face

● 16# ⊕ 12#

| Shell/Insulator | Size 40 | |
|---|--------------|--------------|
| P Shell Size- S Arrangement No. | P40-1 | S40-1 |
| Contact Arrangement | | |
| Contact Size×Contact Qty. | 16#×24 | 12#×6 |
| Service Rating | D | |

View from mating face

| Shell/Insulator | Size 40 | |
|---|----------------|----------------|
| P Shell Size- S Arrangement No. | P40-A35 | S40-A35 |
| Contact Arrangement | | |
| Contact Size×Contact Qty. | 12#×35 | |
| Service Rating | D | |

Shell Size - Arrangement No.

View from mating face

● 16#

| Shell/Insulator | Size 40 | |
|---|---------------------|------------------------|
| P Shell Size- S Arrangement No. | P40-A60 | S40-A60 |
| Contact Arrangement | <p>Pin P</p> | <p>S Socket</p> |
| Contact Size×Contact Qty. | 16#×60 | |
| Service Rating | A | |

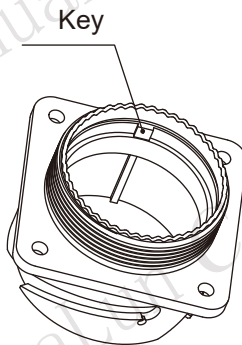
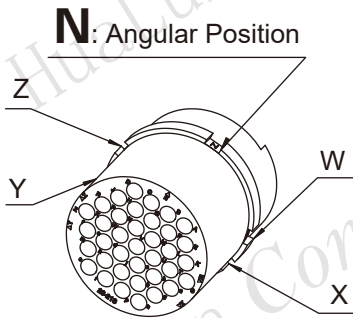
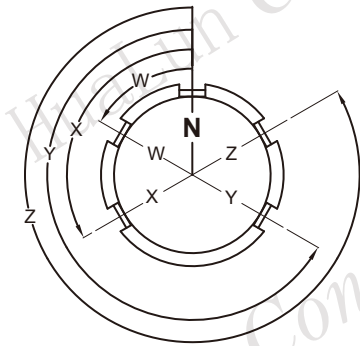
View from mating face

| Shell/Insulator | Size 40 | |
|---|---------------------|------------------------|
| P Shell Size- S Arrangement No. | P40-62 | S40-62 |
| Contact Arrangement | <p>Pin P</p> | <p>S Socket</p> |
| Contact Size×Contact Qty. | 16#×60 | |
| Service Rating | A | |

Angular Displacement Of Insert

When more than two connectors with same Insert are applied to a device together, to alternate the inserts to different angulars can prevent mismatching.

Front face of pin insert



| Insert Code | Angular Displacement Of Insert | | | | |
|-------------|--------------------------------|-----|-----|-----|-----|
| | N | W | X | Y | Z |
| 14S-2 | 0 | — | 120 | 240 | — |
| 14S-5 | 0 | — | 110 | — | — |
| 14S-6 | 0 | — | — | — | — |
| 14S-7 | 0 | 90 | 180 | 270 | — |
| 14S-9 | 0 | 70 | 145 | 215 | 290 |
| 16S-1 | 0 | 80 | — | — | 280 |
| 16S-4 | 0 | 35 | 110 | 250 | 325 |
| 16S-5 | 0 | 70 | 145 | 215 | 290 |
| 16S-8 | 0 | — | 170 | 265 | — |
| 16-9 | 0 | 35 | 110 | 250 | 325 |
| 16-10 | 0 | 90 | 180 | 270 | — |
| 18-11 | 0 | — | 170 | 265 | — |
| 18-12 | 0 | 80 | — | — | 280 |
| 18-19 | 0 | — | 120 | 240 | — |
| 18-22 | 0 | 70 | 145 | 215 | 290 |
| 20-4 | 0 | 45 | 110 | 250 | — |
| 20-7 | 0 | 80 | 110 | 250 | 280 |
| 20-15 | 0 | 80 | — | — | 280 |
| 20-29 | 0 | 80 | — | — | 280 |
| 20-33 | 0 | — | — | — | — |
| 22-2 | 0 | 70 | 145 | 215 | 290 |
| 22-5 | 0 | 35 | 110 | 250 | 325 |
| 22-8 | 0 | 35 | 110 | 250 | 325 |
| 22-14 | 0 | 80 | 110 | 250 | 280 |
| 22-18 | 0 | 80 | 110 | 250 | 280 |
| 22-19 | 0 | 80 | 110 | 250 | 280 |
| 22-20 | 0 | 35 | 110 | 250 | 325 |
| 22-23 | 0 | 35 | — | 250 | — |
| 24-2 | 0 | 80 | — | — | 280 |
| 24-5 | 0 | 80 | 110 | 250 | 280 |
| 24-10 | 0 | 80 | — | — | 280 |
| 24-11 | 0 | 35 | 110 | 250 | 325 |
| 24-22 | 0 | 45 | 110 | 250 | — |
| 28-11 | 0 | 80 | 110 | 250 | 280 |
| 28-12 | 0 | 90 | 180 | 270 | — |
| 28-16 | 0 | 80 | 110 | 250 | 280 |
| 28-21 | 0 | 80 | 110 | 250 | 280 |
| 32-13 | 0 | 80 | 110 | 250 | 280 |
| 32-A13 | 0 | 65 | 130 | 230 | 295 |
| 32-22 | 0 | 80 | 110 | 250 | 280 |
| 32-73 | 0 | 36 | — | — | — |
| 36-10 | 0 | 80 | 125 | 235 | 280 |
| 36-A22 | 0 | 80 | 110 | 250 | 280 |
| 36-52 | 0 | 72 | 144 | 216 | 288 |
| 36-66 | 0 | 110 | 250 | 260 | 280 |
| 40-1 | 0 | 65 | 130 | 235 | 300 |
| 40-A35 | 0 | 70 | 130 | 230 | 290 |
| 40-A60 | 0 | 80 | 110 | 250 | 280 |
| 40-62 | 0 | 30 | 130 | 220 | 290 |

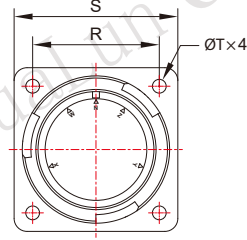
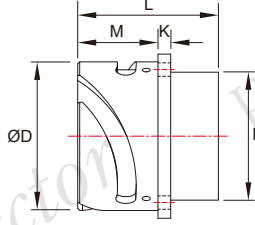
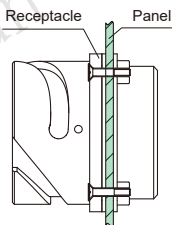
Size of Receptacle

Receptacle ①

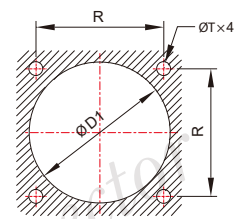
(Panel Mounted)
(No Protective Enclosure)

Front Mounting

BMS3402



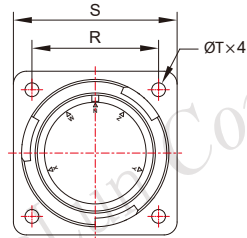
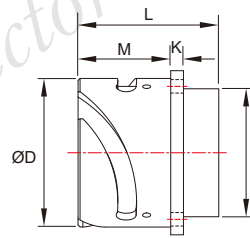
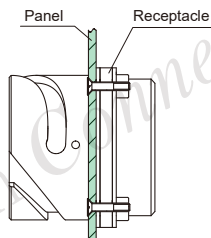
Receptacle Mounting & Mounting Hole



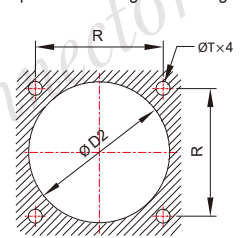
| Shell Spec | $\text{ØD}_{-0.15}^0$ | $M_{+0.2}^0$ | $L_{\pm 0.3}$ | $K_{\pm 0.2}$ | ØN_{\max} | $S_{\pm 0.3}$ | $R_{\pm 0.1}$ | $\text{ØT}_{0}^{+0.1}$ | $\text{ØD1}_{\pm 0.2}$ |
|------------|-----------------------|--------------|---------------|---------------|--------------------|---------------|---------------|------------------------|------------------------|
| 14S | 24.6 | 14.2 | 25.7 | 3.2 | 19.2 | 30.0 | 23.0 | 3.2 | 20.0 |
| 16S | 27.4 | | | | 22.4 | 32.5 | 24.6 | | 23.2 |
| 16 | | 25.6 | 35.0 | | 27.0 | 26.6 | | | |
| 18 | 30.8 | 29.0 | 38.0 | | 29.4 | 30.0 | | | |
| 20 | 34.2 | 32.2 | 41.0 | | 31.8 | 33.2 | | | |
| 22 | 37.4 | 35.3 | 44.5 | | 34.9 | 36.3 | | | |
| 24 | 40.9 | 41.4 | 50.8 | | 39.7 | 42.4 | | | |
| 28 | 46.7 | 33.8 | 37.3 | | 47.8 | 57.0 | 44.5 | 3.7 | 48.8 |
| 32 | 53.4 | | | | 54.1 | 63.5 | 49.2 | | 55.0 |
| 36 | 59.6 | 22.2 | 37.3 | | 59.0 | 69.9 | 55.5 | 4.3 | 60.0 |
| 40 | 65.5 | | | | | | | | |

Rear Mounting

BMS3422



Receptacle Mounting & Mounting Hole



| Shell Spec | $\text{ØD}_{-0.15}^0$ | $M_{+0.2}^0$ | $L_{\pm 0.3}$ | $K_{\pm 0.2}$ | ØN_{\max} | $S_{\pm 0.3}$ | $R_{\pm 0.1}$ | $\text{ØT}_{0}^{+0.1}$ | $\text{ØD2}_{\pm 0.2}$ |
|------------|-----------------------|--------------|---------------|---------------|--------------------|---------------|---------------|------------------------|------------------------|
| 14S | 24.6 | 18.2 | 24.7 | 3.2 | 19.2 | 30.0 | 23.0 | 3.2 | 26.0 |
| 16S | 27.4 | | | | 22.4 | 32.5 | 24.6 | | 28.4 |
| 16 | | 25.6 | 35.0 | | 27.0 | 32.0 | | | |
| 18 | 30.8 | 29.0 | 38.0 | | 29.4 | 35.5 | | | |
| 20 | 34.2 | 32.2 | 41.0 | | 31.8 | 38.5 | | | |
| 22 | 37.4 | 35.3 | 44.5 | | 34.9 | 42.0 | | | |
| 24 | 40.9 | 41.4 | 50.8 | | 39.7 | 48.0 | | | |
| 28 | 46.7 | 23.05 | 33.8 | | 47.8 | 57.0 | 44.5 | 3.7 | 55.0 |
| 32 | 53.4 | | | | 54.1 | 63.5 | 49.2 | | 61.5 |
| 36 | 59.6 | 24.05 | 37.3 | | 59.0 | 69.9 | 55.5 | 4.3 | 67.0 |
| 40 | 65.5 | | | | | | | | |

Size of Receptacle

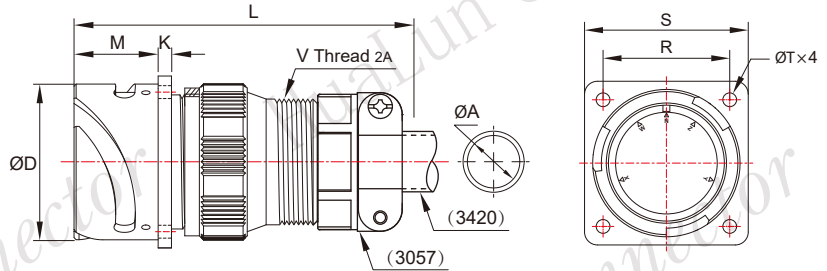
Receptacle ②

(Protective Enclosure)
(Clamp/Gland)

Front Mounting

BMS3400 Insulator ***A

④ ⑤

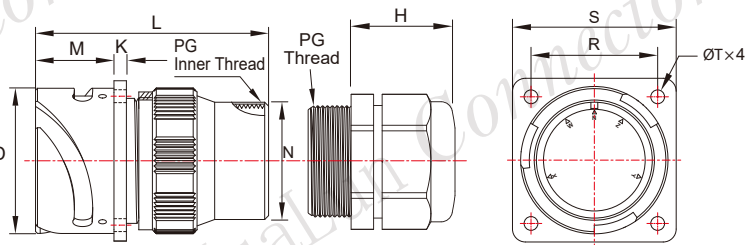


| Shell Spec | $\text{ØD}_{-0.15}^0$ | V Thread 2A | Cable Clamp (3057)+(3420) | OD of Cable(mm) | ØA_{max} | L | $M_{+0.2}^0$ | $K_{\pm 0.2}$ | $S_{\pm 0.3}$ | $R_{\pm 0.1}$ | $\text{ØT}_{+0.1}^0$ |
|------------|-----------------------|--------------------|------------------------------|-----------------|--------------------------|---------|--------------|---------------|---------------|---------------|----------------------|
| 14S | 24.6 | $3/4$ -20UNEF | 14A | Ø 5-7 | 7.92 | 75~77 | 14.2 | 3.2 | 30.0 | 23.0 | 3.2 |
| 16S | 27.4 | $7/8$ -20UNEF | 16A | Ø 8-11 | 11.1 | | | | | | |
| 16 | | | | | | | | | | | |
| 18 | 30.8 | 1-20UNEF | 18A | Ø 11-14 | 14.3 | 83~85 | 20.2 | 3.2 | 35.0 | 27.0 | |
| 20 | 34.2 | $1^{3/16}$ -18UNEF | 20A | Ø 14-16 | 16.2 | | | | | | |
| 22 | 37.4 | | 22A | | | | | | | | |
| 24 | 40.9 | $1^{7/16}$ -18UNEF | 24A | Ø 16-19 | 19.1 | 86~88 | 20.2 | 3.2 | 44.5 | 34.9 | |
| 28 | 46.7 | | 28A | | | | | | | | |
| 32 | 53.4 | $1^{3/4}$ -18UNS | 32A | Ø 19-23 | 23.8 | 88~91 | 20.2 | 3.2 | 57.0 | 44.5 | |
| 36 | 59.6 | 2-18UNS | 36A | Ø 24-31 | 31.7 | 90~92 | | | | | |
| 40 | 65.5 | $2^{1/4}$ -16UN | 40A | Ø 31-34 | 35.0 | 103~105 | 20.2 | 3.2 | 63.5 | 49.2 | |
| | | | | | | | | | | | |

Front Mounting

BMS3400 Insulator PG***

④ ⑤



| Shell Spec | $\text{ØD}_{-0.15}^0$ | PG Inner Thread | OD of Cable(mm) | ØN_{max} | $L_{\pm 0.3}$ | $M_{+0.2}^0$ | $K_{\pm 0.2}$ | H | $S_{\pm 0.3}$ | $R_{\pm 0.1}$ | $\text{ØT}_{+0.1}^0$ |
|------------|-----------------------|-----------------|-----------------|--------------------------|---------------|--------------|---------------|------|---------------|---------------|----------------------|
| 14S | 24.6 | PG9 | Ø 4-8 | 19.2 | 52.7 | 14.2 | 3.2 | 22.0 | 30.0 | 23.0 | 3.2 |
| 16S | 27.4 | PG13.5 | Ø 6-12 | 24.6 | | | | | | | |
| 16 | | | | | | | 57.5 | | | | |
| 18 | 30.8 | PG16 | Ø 8.5-14 | 27.6 | 58.0 | 20.2 | 3.2 | 28.0 | 35.0 | 27.0 | |
| 20 | 34.2 | PG21 | Ø 12.5-18 | 33.6 | | | | | | | |
| 22 | 37.4 | | | | | | | | | | |
| 24 | 40.9 | PG25 | Ø 14-20 | 37.6 | 58.0 | 20.2 | 3.2 | 31.0 | 44.5 | 34.9 | |
| 28 | 46.7 | | | | | | | | | | |
| 32 | 53.4 | PG29 | Ø 18-25 | 42.0 | 58.0 | 20.2 | 3.2 | 33.0 | 50.8 | 39.7 | |
| 36 | 59.6 | | | | | | | | | | |
| 40 | 65.5 | PG36 | Ø 24-32 | 51.2 | 58.0 | 20.2 | 3.2 | 48.0 | 63.5 | 49.2 | |
| | | | | | | | | | | | |

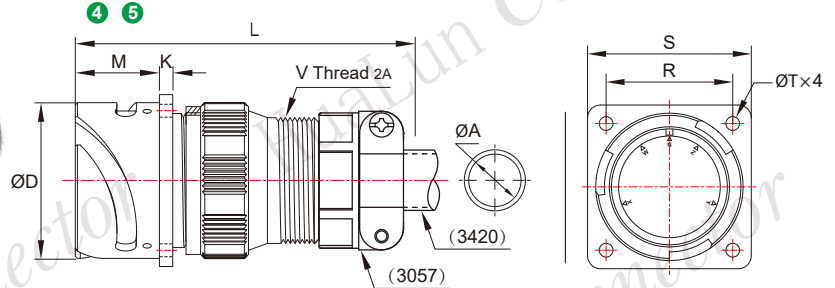
Size of Receptacle

Receptacle ②

(Protective Enclosure)
(Clamp/Gland)

Rear Mounting

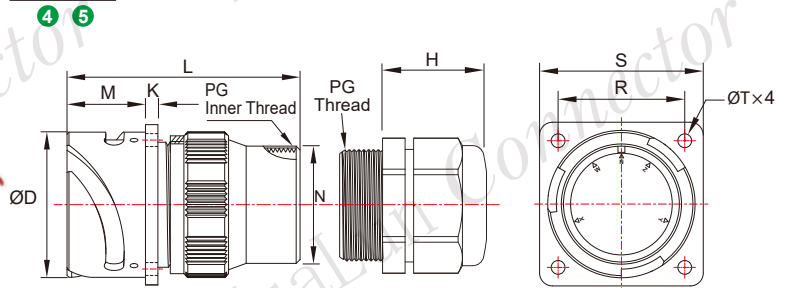
BMS3420 Insulator **A



| Shell Spec | $\text{ØD}_{-0.15}^0$ | V Thread 2A | Cable Clamp (3057)+(3420) | OD of Cable(mm) | ØA_{max} | L | $M_{+0.2}^0$ | $K_{\pm 0.2}$ | $S_{\pm 0.3}$ | $R_{\pm 0.1}$ | $\text{ØT}_{+0.1}^0$ | | |
|------------|-----------------------|-------------------------|------------------------------|-------------------|--------------------------|---------|--------------|---------------|---------------|---------------|----------------------|------|-----|
| 14S | 24.6 | $3/4$ -20UNEF | 14A | $\text{Ø} 5$ -7 | 7.92 | 75~77 | 18.2 | 3.2 | 30.0 | 23.0 | 3.2 | | |
| 16S | 27.4 | $7/8$ -20UNEF | 16A | $\text{Ø} 8$ -11 | 11.1 | 81~83 | 23.05 | | 32.5 | 24.6 | | | |
| 16 | | | | | | 83~85 | | | 35.0 | 27.0 | | | |
| 18 | 30.8 | 1-20UNEF | 18A | $\text{Ø} 11$ -14 | 14.3 | 83~85 | | | 24.05 | 38.0 | | 29.4 | 3.7 |
| 20 | 34.2 | $1\frac{3}{16}$ -18UNEF | 20A | $\text{Ø} 14$ -16 | 16.2 | | | | | 86~88 | | 41.0 | |
| 22 | 37.4 | | 22A | | | 44.5 | | | | 34.9 | | | |
| 24 | 40.9 | $1\frac{7}{16}$ -18UNEF | 24A | $\text{Ø} 16$ -19 | 19.1 | 88~91 | | 50.8 | | 39.7 | 4.3 | | |
| 28 | 46.7 | | 28A | | | | 57.0 | 44.5 | | | | | |
| 32 | 53.4 | $1\frac{3}{4}$ -18UNS | 32A | $\text{Ø} 19$ -23 | 23.8 | 90~92 | 63.5 | 49.2 | | | | | |
| 36 | 59.6 | 2-18UNS | 36A | $\text{Ø} 24$ -31 | 31.7 | 103~105 | 69.9 | 55.5 | | | | | |
| 40 | 65.5 | $2\frac{1}{4}$ -16UN | 40A | $\text{Ø} 31$ -34 | 35.0 | | | | | | | | |

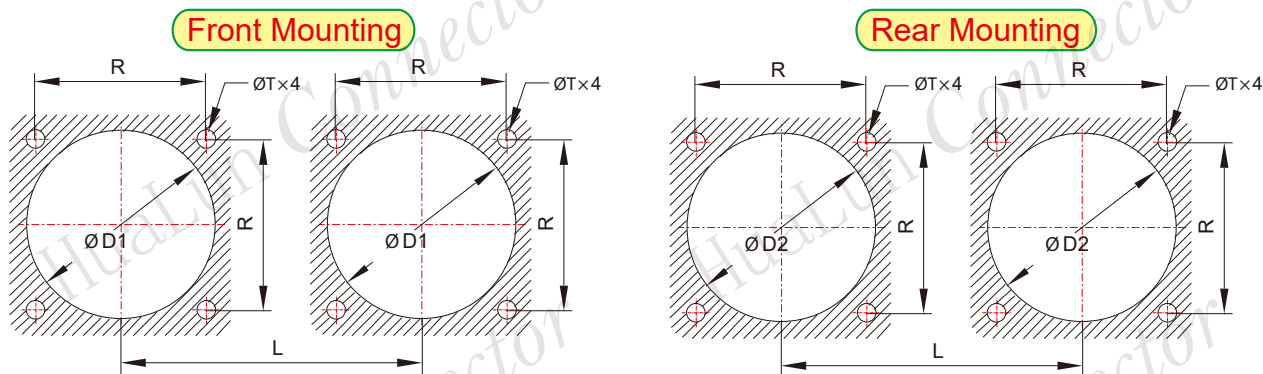
Rear Mounting

BMS3420 Insulator PG**



| Shell Spec | $\text{ØD}_{-0.15}^0$ | PG Inner Thread | OD of Cable(mm) | ØN_{max} | $L_{\pm 0.3}$ | $M_{+0.2}^0$ | $K_{\pm 0.2}$ | H | $S_{\pm 0.3}$ | $R_{\pm 0.1}$ | $\text{ØT}_{+0.1}^0$ | | |
|------------|-----------------------|-----------------|---------------------|--------------------------|---------------|--------------|-------------------|------|---------------|-------------------|----------------------|------|------|
| 14S | 24.6 | PG9 | $\text{Ø} 4$ -8 | 19.2 | 52.7 | 18.2 | 3.2 | 22.0 | 30.0 | 23.0 | 3.2 | | |
| 16S | 27.4 | PG13.5 | $\text{Ø} 6$ -12 | 24.6 | | | | 57.5 | 23.05 | 27.0 | | 32.5 | 24.6 |
| 16 | | | | | 28.0 | 35.0 | | | | 27.0 | | | |
| 18 | 30.8 | PG16 | $\text{Ø} 8.5$ -14 | 27.6 | 58.0 | 24.05 | | | | 31.0 | | 38.0 | 29.4 |
| 20 | 34.2 | PG21 | $\text{Ø} 12.5$ -18 | 33.6 | | | | | | 33.0 | | 41.0 | 31.8 |
| 22 | 37.4 | | | | PG25 | | | | | $\text{Ø} 14$ -20 | | 37.6 | 37.0 |
| 24 | 40.9 | PG29 | $\text{Ø} 18$ -25 | 42.0 | | | 50.8 | | | | 39.7 | | |
| 28 | 46.7 | | | | PG36 | | $\text{Ø} 24$ -32 | 51.2 | 57.0 | 44.5 | | | |
| 32 | 53.4 | 48.0 | 63.5 | 49.2 | | | | | | | | | |
| 36 | 59.6 | | 69.9 | 55.5 | | | | | | | | | |
| 40 | 65.5 | | | | | | | | | | | | |

Receptacle Mounting & Mounting Hole



| Shell Spec | $\varnothing T^{+0.1}_0$ | $\varnothing D1_{\pm 0.2}$ | $\varnothing D2_{\pm 0.2}$ | $R_{\pm 0.1}$ | L | Screw Spec |
|------------|--------------------------|----------------------------|----------------------------|---------------|------|------------|
| 14S | 3.2 | 20.0 | 26.0 | 23.0 | 33.0 | M3 × 10 |
| 16S | | 23.2 | 28.4 | 24.6 | 34.4 | |
| 16 | | 26.6 | 32.0 | 27.0 | 38.3 | |
| 18 | | 30.0 | 35.5 | 29.4 | 41.7 | |
| 20 | | 33.2 | 38.5 | 31.8 | 45.2 | |
| 22 | 3.7 | 36.3 | 42.0 | 34.9 | 48.7 | M4 × 12 |
| 24 | | 42.4 | 48.0 | 39.7 | 55.5 | |
| 28 | | 48.8 | 55.0 | 44.5 | 62.4 | |
| 32 | 4.3 | 55.0 | 61.5 | 49.2 | 69.0 | M4 × 12 |
| 36 | | 60.0 | 67.0 | 55.5 | 75.0 | |
| 40 | | | | | | |

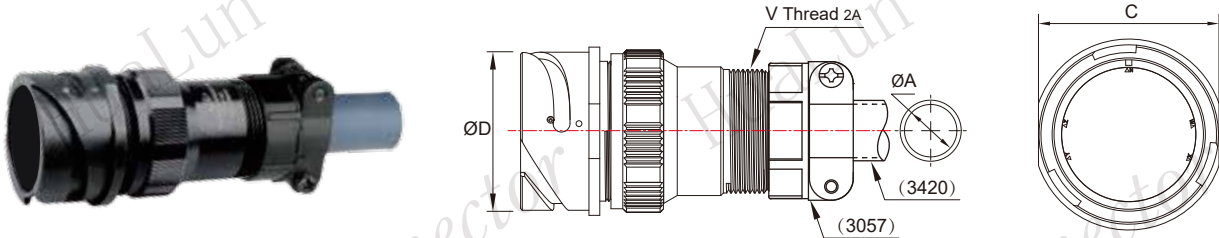
Size of Receptacle

Receptacle ③

(Free)

Free BMS3401 Insulator **A

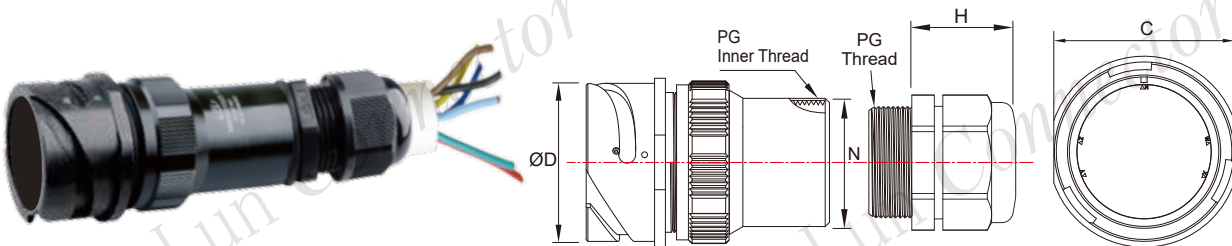
④ ⑤



| Shell Spec | ØD $\frac{0}{-0.15}$ | V Thread 2A | Cable Clamp (3057)+(3420) | OD of Cable(mm) | ØA max | C |
|------------|----------------------|--|------------------------------|-----------------|--------|------|
| 14S | 24.6 | 3/4-20UNEF | 14A | Ø 5-7 | 7.92 | 25.2 |
| 16S | 27.4 | 7/8-20UNEF | 16A | Ø 8-11 | 11.1 | 28.8 |
| 16 | | | | | | 31.5 |
| 18 | 30.8 | 1-20UNEF | 18A | Ø 11-14 | 14.3 | 31.5 |
| 20 | 34.2 | 1 ³ / ₁₆ -18UNEF | 20A | Ø 14-16 | 16.2 | 34.6 |
| 22 | 37.4 | | 22A | | | 38.0 |
| 24 | 40.9 | 1 ⁷ / ₁₆ -18UNEF | 24A | Ø 16-19 | 19.1 | 41.5 |
| 28 | 46.7 | | 28A | | | 47.0 |
| 32 | 53.4 | 1 ³ / ₄ -18UNS | 32A | Ø 19-23 | 23.8 | 53.7 |
| 36 | 59.6 | 2-18UNS | 36A | Ø 24-31 | 31.7 | 60.2 |
| 40 | 65.5 | 2 ¹ / ₄ -16UN | 40A | Ø 31-34 | 35.0 | 66.2 |

Free BMS3401 Insulator PG**

④ ⑤



| Shell Spec | ØD $\frac{0}{-0.15}$ | PG Inner Thread | OD of Cable(mm) | ØN max | H | C |
|------------|----------------------|-----------------|-----------------|--------|------|------|
| 14S | 24.6 | PG9 | Ø 4-8 | 19.2 | 22.0 | 25.2 |
| 16S | 27.4 | PG13.5 | Ø 6-12 | 24.6 | 27.0 | 28.8 |
| 16 | | | | | | 31.5 |
| 18 | 30.8 | PG16 | Ø 8.5-14 | 27.6 | 28.0 | 31.5 |
| 20 | 34.2 | PG21 | Ø 12.5-18 | 33.6 | 31.0 | 34.6 |
| 22 | 37.4 | | | | | 38.0 |
| 24 | 40.9 | PG25 | Ø 14-20 | 37.6 | 33.0 | 41.5 |
| 28 | 46.7 | | | | | 47.0 |
| 32 | 53.4 | PG29 | Ø 18-25 | 42.0 | 37.0 | 53.7 |
| 36 | 59.6 | PG36 | Ø 24-32 | 51.2 | 48.0 | 60.2 |
| 40 | 65.5 | | | | | 66.2 |



TUV SUD

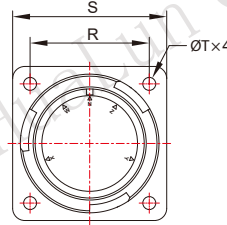
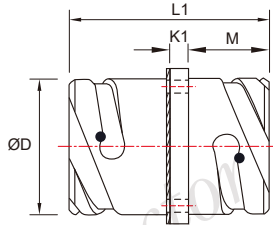


ISO9001 ISO14001 ISO45001

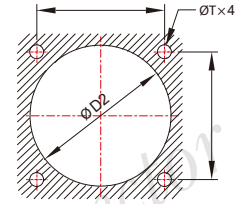
Size of Receptacle

Receptacle ④ (Adapter)

Adapter **BMS34022** (Square flange)

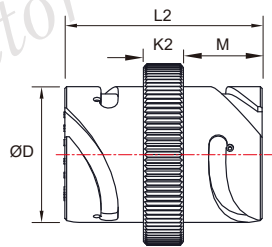


Receptacle Mounting & Mounting Hole



| Shell Spec | $\text{ØD}_{-0.15}^0$ | $L1_{\pm 0.7}$ | $K1_{\pm 0.2}$ | $M_{+0.2}^0$ | $S_{\pm 0.3}$ | $R_{\pm 0.1}$ | $\text{ØT}_{+0.1}^0$ | $\text{ØD2}_{\pm 0.2}$ |
|------------|-----------------------|----------------|----------------|--------------|---------------|---------------|----------------------|------------------------|
| 14S | 24.6 | 37.5 | 3.2 | 14.20 | 30.0 | 23.0 | 3.2 | 26.0 |
| 16S | 27.4 | | | | 32.5 | 24.6 | | 28.4 |
| 16 | 27.4 | 51.4 | 4.0 | 19.0 | 35.0 | 27.0 | | 32.0 |
| 18 | 30.8 | | | | 38.0 | 29.4 | | 35.5 |
| 20 | 34.2 | | | | 41.0 | 31.8 | | 38.5 |
| 22 | 37.4 | | | 44.5 | 34.9 | 42.0 | | |
| 24 | 40.9 | | | 50.8 | 39.7 | 48.0 | | |
| 28 | 46.7 | | | 57.0 | 44.5 | 55.0 | | |
| 32 | 53.4 | 22.2 | | | 63.5 | 49.2 | 4.3 | 61.5 |
| 36 | 59.6 | | | | 69.9 | 55.5 | 67.0 | |
| 40 | 65.5 | | | | | | | |

Adapter **BMS34011** (Round flange)

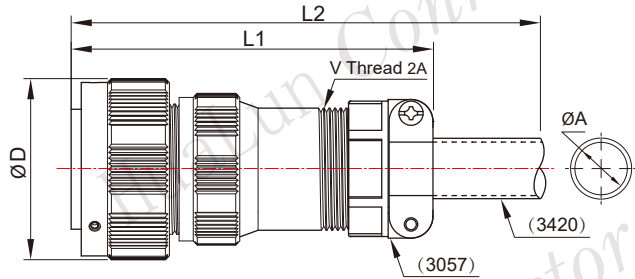


| Shell Spec | $\text{ØD}_{-0.15}^0$ | $L2_{\pm 0.7}$ | $K2_{\pm 0.2}$ | $M_{+0.2}^0$ |
|------------|-----------------------|----------------|----------------|--------------|
| 14S | 24.6 | 39.4 | 11.0 | 14.20 |
| 16S | 27.4 | | | |
| 16 | 27.4 | 49.0 | | 19.0 |
| 18 | 30.8 | | | |
| 20 | 34.2 | | | |
| 22 | 37.4 | 52.2 | | 20.6 |
| 24 | 40.9 | | | |
| 28 | 46.7 | 55.4 | 22.2 | |
| 32 | 53.4 | | | |
| 36 | 59.6 | | | |
| 40 | 65.5 | | | |

Size of Plug

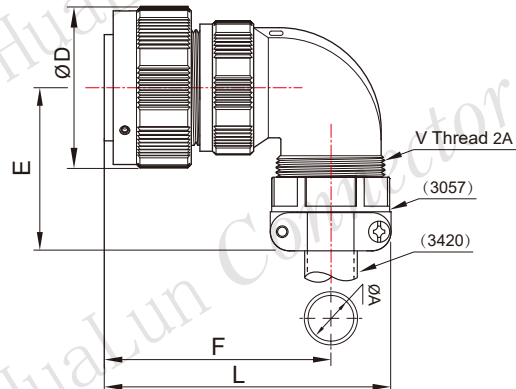
Plug

BMS3406 Insulator **A (Cable Clamp)



| Shell Spec | ØD ₀ ^{-0.15} | V Thread 2A | Cable Clamp (3057) + (3420) | OD of Cable(mm) | ØA max | L1 max | L2 max |
|------------|----------------------------------|--|-----------------------------|-----------------|--------|--------|--------|
| 14S | 29.2 | 3/4-20UNEF | 14A | Ø 5-7 | 7.92 | 82 | 115 |
| 16S | 32.0 | 7/8-20UNEF | 16A | Ø 8-11 | 11.1 | 87 | 118 |
| 16 | | | | | | | |
| 18 | 36.5 | 1-20UNEF | 18A | Ø 11-14 | 14.3 | 89 | 121 |
| 20 | 39.9 | 1 ³ / ₁₆ -18UNEF | 20A | Ø 14-16 | 16.2 | 92 | |
| 22 | 43.1 | | 22A | | | | |
| 24 | 46.6 | 1 ⁷ / ₁₆ -18UNEF | 24A | Ø 16-19 | 19.1 | 95 | 124 |
| 28 | 53.4 | | 28A | | | | |
| 32 | 60.1 | 1 ³ / ₄ -18UNS | 32A | Ø 19-23 | 23.8 | 96 | 127 |
| 36 | 66.3 | 2-18UNS | 36A | Ø 24-31 | 31.7 | 100 | |
| 40 | 72.4 | 2 ¹ / ₄ -16UN | 40A | Ø 31-34 | 35.0 | 112 | |

BMS3408 Insulator **A (Cable Clamp)



| Shell Spec | ØD ₀ ^{-0.15} | V Thread 2A | Cable Clamp (3057) + (3420) | OD of Cable(mm) | ØA max | E max | F max | L max |
|------------|----------------------------------|--|-----------------------------|-----------------|--------|-------|-------|-------|
| 14S | 29.2 | 3/4-20UNEF | 14A | Ø 5-7 | 7.92 | 40.0 | 47.0 | 70.0 |
| 16S | 32.0 | 7/8-20UNEF | 16A | Ø 8-11 | 11.1 | 40.8 | 59.5 | 72.5 |
| 16 | | | | | | | | |
| 18 | 36.5 | 1-20UNEF | 18A | Ø 11-14 | 14.3 | 41.7 | 60.4 | 75.5 |
| 20 | 39.9 | 1 ³ / ₁₆ -18UNEF | 20A | Ø 14-16 | 16.2 | 42.6 | 61.8 | 79.0 |
| 22 | 43.1 | | 22A | | | | | |
| 24 | 46.6 | 1 ⁷ / ₁₆ -18UNEF | 24A | Ø 16-19 | 19.1 | 54.6 | 68.4 | 89.5 |
| 28 | 53.4 | | 28A | | | | | |
| 32 | 60.1 | 1 ³ / ₄ -18UNS | 32A | Ø 19-23 | 23.8 | 58.5 | 72.9 | 98.6 |
| 36 | 66.3 | 2-18UNS | 36A | Ø 24-31 | 31.7 | 62.0 | 73.9 | 102.0 |
| 40 | 72.4 | 2 ¹ / ₄ -16UN | 40A | Ø 31-34 | 35.0 | 79.0 | 76.9 | 108.7 |

Size of Plug

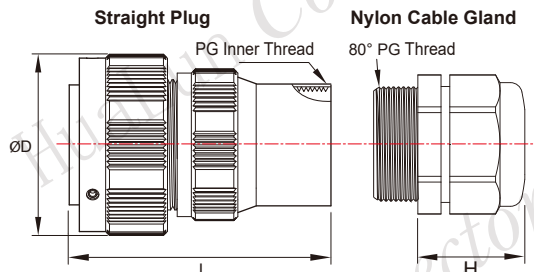
Plug

BMS3406 Insulator PG** (Nylon Cable Gland)

4 5



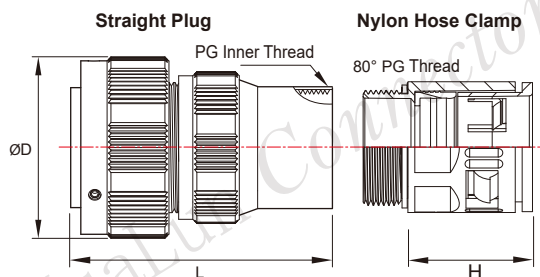
IP67



| Shell Spec | ØD _{-0.15} | PG Inner Thread | OD of Cable(mm) | L | H |
|------------|---------------------|-----------------|-----------------|---------|------|
| 14S | 29.2 | PG9 | Ø 4-8 | 50 | 22.0 |
| 16S | 32.0 | PG13.5 | Ø 6-12 | | 60 |
| 16 | | | | PG16 | |
| 18 | PG21 | Ø 12.5-18 | 31.0 | | |
| 20 | | | PG25 | Ø 14-20 | |
| 22 | PG29 | Ø 18-25 | | | 37.0 |
| 24 | | | PG36 | Ø 24-32 | 80 |
| 28 | 53.4 | | | | |
| 32 | 60.1 | | | | |
| 36 | 66.3 | | | | |
| 40 | 72.4 | | | | |

BMS3406 Insulator G** (Nylon Hose Clamp)

4 5

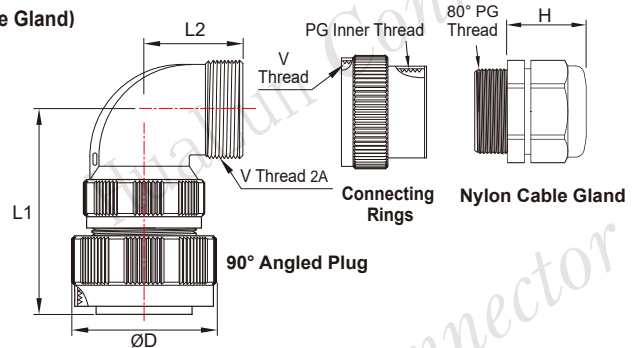


| Shell Spec | ØD _{-0.15} | PG Inner Thread | OD of Cable(mm) | L | Nylon Hose Clamp Code |
|------------|---------------------|-----------------|-----------------|---------|-----------------------|
| 14S | 29.2 | PG9 | Ø 4-8 | 50 | G9 |
| 16S | 32.0 | PG13.5 | Ø 6-12 | | 60 |
| 16 | | | | PG16 | |
| 18 | PG21 | Ø 12.5-18 | G21 | | |
| 20 | | | PG25 | Ø 14-20 | |
| 22 | PG29 | Ø 18-25 | | | G29 |
| 24 | | | PG36 | Ø 24-32 | 80 |
| 28 | 53.4 | | | | |
| 32 | 60.1 | | | | |
| 36 | 66.3 | | | | |
| 40 | 72.4 | | | | |

Size of Plug

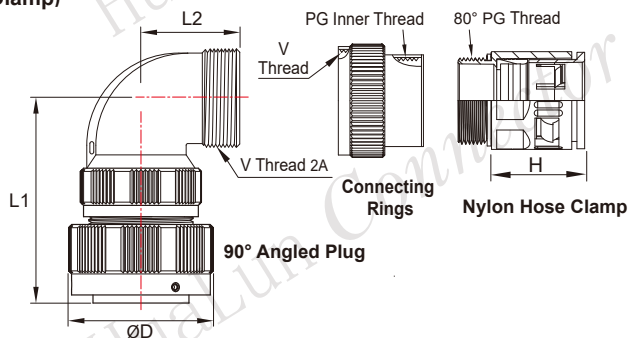
Plug

BMS3408 Insulator **PG**** (Nylon Cable Gland)



| Shell Spec | ØD _{-0.15} | L1±0.2 | L2±0.2 | V Thread 2A | PG Inner Thread | OD of Cable(mm) | H |
|------------|---------------------|--------|--------|---------------|-----------------|-----------------|------|
| 14S | 29.2 | 47 | 30 | ¾-20UNEF | PG9 | Ø 4-8 | 22.0 |
| 16S | 32.0 | 48 | | 7/8-20UNEF | PG13.5 | Ø 6-12 | 27.0 |
| 16 | | 57 | | | | | |
| 18 | 36.5 | 58 | 35 | 1-20UNEF | PG16 | Ø 8.5-14 | 28.0 |
| 20 | 39.9 | 61 | | 1 3/16-18UNEF | PG21 | Ø 12.5-18 | 31.0 |
| 22 | 43.1 | | | | | | |
| 24 | 46.6 | 66 | 40 | 1 7/16-18UNEF | PG25 | Ø 14-20 | 33.0 |
| 28 | 53.4 | | | | | | |
| 32 | 60.1 | 72 | 45 | 1 3/4-18UNS | PG29 | Ø 18-25 | 37.0 |
| 36 | 66.3 | 75 | 50 | 2-18UNS | PG36 | Ø 24-32 | 48.0 |
| 40 | 72.4 | 78 | 55 | 2 1/4-16UN | | | |

BMS3408 Insulator **G**** (Nylon Hose Clamp)



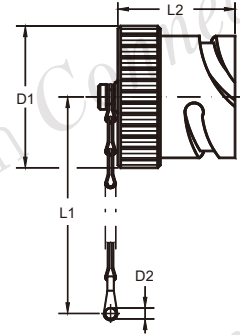
| Shell Spec | ØD _{-0.15} | L1±0.2 | L2±0.2 | V Thread 2A | PG Inner Thread | OD of Cable(mm) | Nylon Hose Clamp Code |
|------------|---------------------|--------|--------|---------------|-----------------|-----------------|-----------------------|
| 14S | 29.2 | 47 | 30 | ¾-20UNEF | PG9 | Ø 4-8 | G9 |
| 16S | 32.0 | 48 | | 7/8-20UNEF | PG13.5 | Ø 6-12 | G13.5 |
| 16 | | 57 | | | | | |
| 18 | 36.5 | 58 | 35 | 1-20UNEF | PG16 | Ø 8.5-14 | G16 |
| 20 | 39.9 | 61 | | 1 3/16-18UNEF | PG21 | Ø 12.5-18 | G21 |
| 22 | 43.1 | | | | | | |
| 24 | 46.6 | 66 | 40 | 1 7/16-18UNEF | PG25 | Ø 14-20 | G25 |
| 28 | 53.4 | | | | | | |
| 32 | 60.1 | 72 | 45 | 1 3/4-18UNS | PG29 | Ø 18-25 | G29 |
| 36 | 66.3 | 75 | 50 | 2-18UNS | PG36 | Ø 24-32 | G36 |
| 40 | 72.4 | 78 | 55 | 2 1/4-16UN | | | |

Protection Cap-Parts To Be Ordered Separately

Plug
Protection Cap



Size of Cap



Unit: mm

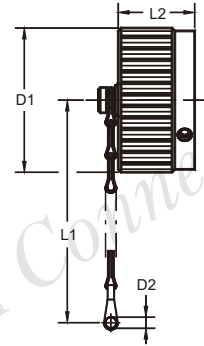
| Dust Cap Code | Application |
|--------------------|---------------|
| BMS25042-14 | Shell 14 Plug |
| BMS25042-16 | Shell 16 Plug |
| BMS25042-18 | Shell 18 Plug |
| BMS25042-20 | Shell 20 Plug |
| BMS25042-22 | Shell 22 Plug |
| BMS25042-24 | Shell 24 Plug |
| BMS25042-28 | Shell 28 Plug |
| BMS25042-32 | Shell 32 Plug |
| BMS25042-36 | Shell 36 Plug |
| BMS25042-40 | Shell 40 Plug |

| Shell Spec | D1 Max | D2 $+0.6$ -0 | L1 Max | L2 Max |
|------------|--------|-------------------|--------|--------|
| 14S | 27.5 | 4.3 | 100 | 29 |
| 16S | 30.0 | | | |
| 16 | 33.5 | | 115 | 37 |
| 18 | 37.0 | | | |
| 20 | 40.0 | | | |
| 22 | 43.5 | | | |
| 24 | 49.5 | 5.5 | 130 | 37 |
| 28 | 56.0 | | | |
| 32 | 62.5 | | 190 | 37 |
| 36 | 73.5 | | | |
| 40 | 73.5 | | | |

Receptacle
Protection Cap



Size of Cap



Unit: mm

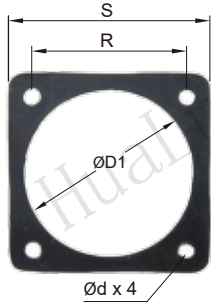
| Dust Cap Code | Application |
|--------------------|---------------------|
| BMS25043-14 | Shell 14 Receptacle |
| BMS25043-16 | Shell 16 Receptacle |
| BMS25043-18 | Shell 18 Receptacle |
| BMS25043-20 | Shell 20 Receptacle |
| BMS25043-22 | Shell 22 Receptacle |
| BMS25043-24 | Shell 24 Receptacle |
| BMS25043-28 | Shell 28 Receptacle |
| BMS25043-32 | Shell 32 Receptacle |
| BMS25043-36 | Shell 36 Receptacle |
| BMS25043-40 | Shell 40 Receptacle |

| Shell Spec | D1 Max | D2 $+0.6$ -0 | L1 Max | L2 Max |
|------------|--------|-------------------|--------|--------|
| 14S | 30.5 | 4.3 | 90 | 20 |
| 16S | 33.0 | | | |
| 16 | 37.5 | | 100 | 25 |
| 18 | 41.0 | | | |
| 20 | 44.0 | | | |
| 22 | 47.5 | | | |
| 24 | 54.5 | 5.5 | 115 | 25 |
| 28 | 61.0 | | | |
| 32 | 67.5 | | 160 | 25 |
| 36 | 73.5 | | | |
| 40 | 73.5 | | | |

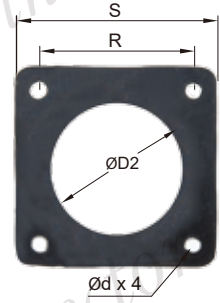
Mounting Plate & Gasket

Rubber Sealing Gasket Size

● Rear Mounting

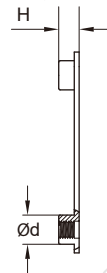
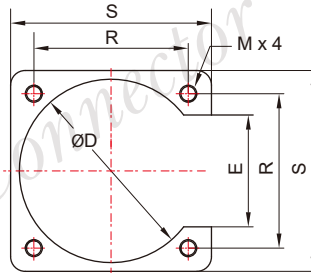
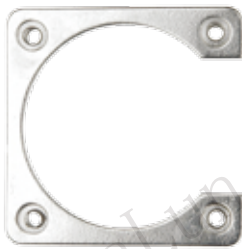


● Front Mounting



| Shell Size | Rear Mounting ØD1 | R _{±0.1} | S _{±0.3} | Ød _{+0.1} ₀ | Front Mounting ØD2 |
|------------|-------------------|-------------------|-------------------|---------------------------------|--------------------|
| 14S | 24.9 | 23.0 | 28.6 | 3.5 | 22.1 |
| 16S、16 | 28.2 | 24.6 | 32.5 | | 25.3 |
| 18 | 30.9 | 27.0 | 35.0 | | 28.4 |
| 20 | 34.3 | 29.4 | 38.0 | | 31.6 |
| 22 | 37.7 | 31.8 | 41.3 | | 34.8 |
| 24 | 41.2 | 34.9 | 44.5 | 3.7 | 38 |
| 28 | 46.8 | 39.7 | 50.8 | | 44.3 |
| 32 | 53.4 | 44.5 | 57.2 | 4.5 | 50.7 |
| 36 | 59.6 | 49.2 | 63.5 | | 57 |
| 40 | 65.5 | 55.5 | 69.9 | | 61.9 |

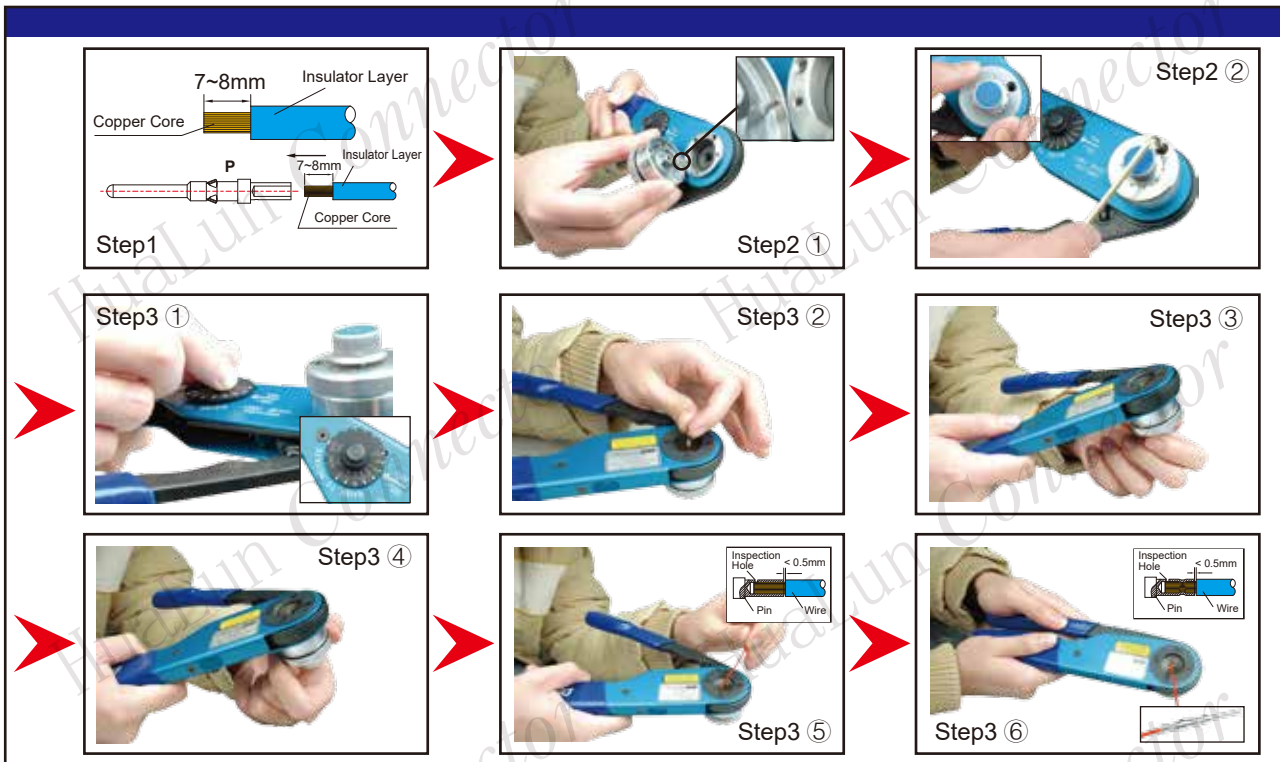
Mounting Plate(Metal) Order Code, Size



Mounting Plate & Gasket

| Code | Shell Size | R _{±0.1} | S _{±0.3} | ØD | E | H | Ød _{+0.1} ₀ | Thread M | Screw Spec |
|-------------|------------|-------------------|-------------------|------|------|-----|---------------------------------|----------|------------|
| SG14 | 14S | 23.0 | 30.0 | 24.9 | 15.8 | 2.6 | 6.3 | M3 | M3 x 10 |
| SG16 | 16S、16 | 24.6 | 32.3 | 28.2 | 17.9 | | | | |
| SG18 | 18 | 27.0 | 34.6 | 30.9 | 20.2 | | | | |
| SG20 | 20 | 29.4 | 38.5 | 34.3 | 22.5 | | | | |
| SG22 | 22 | 31.8 | 40.8 | 37.7 | 23.5 | | | | |
| SG24 | 24 | 34.9 | 44.8 | 41.2 | 25.9 | | | | |
| SG28 | 28 | 39.7 | 51.2 | 46.8 | 29.1 | 3.0 | 8.0 | M4 | M4 x 12 |
| SG32 | 32 | 44.5 | 59.1 | 53.4 | 30.7 | | | | |
| SG36 | 36 | 49.2 | 63.9 | 59.6 | 35.5 | | | | |
| SG40 | 40 | 55.5 | 74.7 | 65.5 | 38.6 | | | | |

Assemble Parts



Live parts should not be disassembled without authorization

Be sure to apply thread glue to the threads when assembling

Be sure to apply thread glue to the threads when assembling



Should not be disassembled



Be sure to apply thread glue



The cable clamp is tightened lastly



Instructions for connector use and storage

- ◆ It is wrong to insert into or take out an electric connector which has been electrified.
- ◆ Dust cap must be applied after a plug and receptacle are separated.
- ◆ The warehouse environment where the connectors are stored, the temperature is 5-35°C, relative humidity <80%, should be clean, ventilated, dry and free of corrosive media.

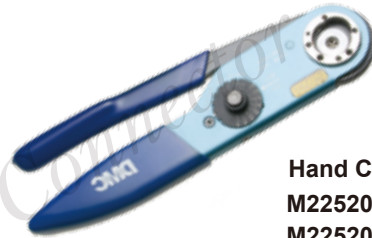
Crimp, Insertion & Extraction



Tools

Hand Crimp Tool

| | | | |
|--------------------|--------------------|-------|---------------------|
| Tool Order No. | M22520/1-01 | | M22520/23-01 |
| Applicable Contact | ● 16# | ⊕ 12# | ⊗ 8# |
| Applicable Locator | D1612 | | D8 |



Hand Crimp Tool
 M22520/1-01
 M22520/23-01



Locator
 D1612
 D8

Figure (1)

Pneumatic Crimp Tool

Pneumatic crimp tool would be update efficiency and fit for mass crimping.

Please contact us for an order



Figure (2)

Extraction Tool

| | | | |
|--------------------|-------------|-------------|------------|
| Tool Order No. | ET16 | ET12 | ET8 |
| Applicable Contact | ● 16# | ⊕ 12# | ⊗ 8# |



Figure (3)

Special Tool for Plug

| | | | | | | | | | | |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Order No. | TS14 | TS16 | TS18 | TS20 | TS22 | TS24 | TS28 | TS32 | TS36 | TS40 |
| Shell Size | 14S | 16S、16 | 18 | 20 | 22 | 24 | 28 | 32 | 36 | 40 |



Figure (4)



SHANGHAI HUALUN INSTRUMENTS & ELECTRONICS CO., LTD.

SALES & MARKETING DEPARTMENT

ADD: Rm3409, Tower2, Kerry Everbright City, West
Tianmu Rd218, Shanghai
P.C. : 200070
TEL : 86-21-63178300 ext. 205
FAX : 86-21-63178083
E-MAIL : liz@hualunconnector.com
WEB : www.hualunconnector.com

FACTORY & HEADQUARTERS

ADD: Factory building 1 & 3, Jinjiang Industrial
Park, Qianyang Rd271, Shanghai
P.C. : 200333

- Hualun reserves the right to modify the technical and upgrade of the product
- Any form of diversion of this catalogue must be authorized by Hualun