

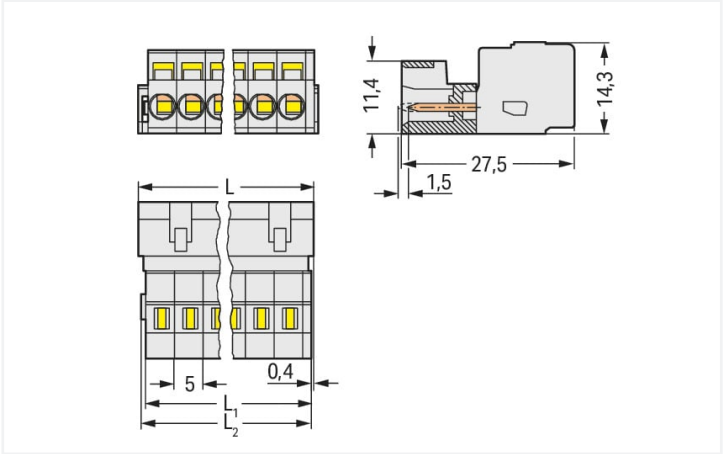
Data Sheet | Item Number: 721-620

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 20-pole;  
100% protected against mismating; 2,50 mm²; light gray

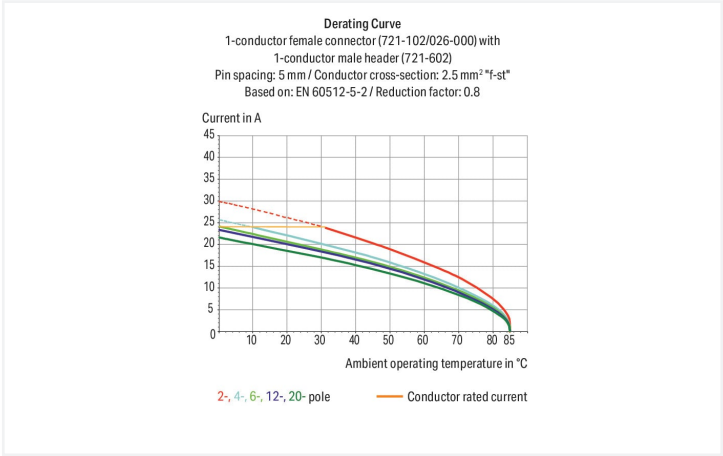
<https://www.wago.com/721-620>



Color: ■ light gray



Dimensions in mm  
 $L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$   
 $L2 = L - 1.7 \text{ mm}$   
 $L3 = L - 1.2 \text{ mm}$



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For wire-to-wire and board-to-wire connections
- Versions available with snap-in mounting feet or flanges for panel or through-panel mounting
- 3- to 5-pole male connectors are also available with preceding ground contact
- 100 % protected against mismating
- With coding fingers

| Notes              |                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety information | The MCS – MULTI CONNECTION SYSTEM includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must not be connected/disconnected when live or under load. When used as intended, these connectors must not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live when unmated. |
| Variants:          | Other pole numbers<br>Gold-plated or partially gold-plated contact surfaces<br>Other versions (or variants) can be requested from WAGO Sales or configured at <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> .                                                                                                                                                                             |



Electrical data

| Ratings per          | IEC/EN 60664-1 |       |       |
|----------------------|----------------|-------|-------|
| Overvoltage category | III            | III   | II    |
| Pollution degree     | 3              | 2     | 2     |
| Nominal voltage      | 320 V          | 320 V | 630 V |
| Rated surge voltage  | 4 kV           | 4 kV  | 4 kV  |
| Rated current        | 12 A           | 12 A  | 12 A  |

| Approvals per | UL 1059 |   |       |
|---------------|---------|---|-------|
| Use group     | B       | C | D     |
| Rated voltage | 300 V   | - | 300 V |
| Rated current | 15 A    | - | 10 A  |

| Approvals per | UL 1977 |
|---------------|---------|
| Rated voltage | 600 V   |
| Rated current | 15 A    |

| Approvals per | CSA   |   |       |
|---------------|-------|---|-------|
| Use group     | B     | C | D     |
| Rated voltage | 300 V | - | 300 V |
| Rated current | 15 A  | - | 10 A  |

Connection data

|                            |    |
|----------------------------|----|
| Connection points          | 20 |
| Total number of potentials | 20 |
| Number of connection types | 1  |
| Number of levels           | 1  |

| Connection 1                                      |                                            |
|---------------------------------------------------|--------------------------------------------|
| Connection technology                             | CAGE CLAMP®                                |
| Actuation type                                    | Operating tool                             |
| Actuation direction 1                             | Operation parallel to conductor entry      |
| Actuation direction 2                             | Operation perpendicular to conductor entry |
| Solid conductor                                   | 0.08 ... 2.5 mm² / 28 ... 12 AWG           |
| Fine-stranded conductor                           | 0.08 ... 2.5 mm² / 28 ... 12 AWG           |
| Fine-stranded conductor; with insulated ferrule   | 0.25 ... 1.5 mm²                           |
| Fine-stranded conductor; with uninsulated ferrule | 0.25 ... 2.5 mm²                           |
| Strip length                                      | 8 ... 9 mm / 0.31 ... 0.35 inches          |
| Pole number                                       | 20                                         |
| Conductor entry direction to mating direction     | 0°                                         |

Physical data

|             |                         |
|-------------|-------------------------|
| Pin spacing | 5 mm / 0.197 inches     |
| Width       | 103.2 mm / 4.063 inches |
| Height      | 14.3 mm / 0.563 inches  |
| Depth       | 27.5 mm / 1.083 inches  |

Mechanical data

|                                                        |     |
|--------------------------------------------------------|-----|
| Variable coding                                        | Yes |
| Direct ground contact to DIN-rail/drilled hole/housing | No  |
| Anti-rotation protection                               | Yes |



| Plug-in connection                 |                     |  |
|------------------------------------|---------------------|--|
| Contact type (pluggable connector) | Male connector/plug |  |
| Connector (connection type)        | for conductor       |  |
| Mismating protection               | Yes                 |  |

| Material data               |                                                                          |  |
|-----------------------------|--------------------------------------------------------------------------|--|
| Note (material data)        | <a href="#">Information on material specifications can be found here</a> |  |
| Color                       | light gray                                                               |  |
| Material group              | I                                                                        |  |
| Insulation material         | Polyamide (PA66)                                                         |  |
| Flammability class per UL94 | V0                                                                       |  |
| Clamping spring material    | Chrome-nickel spring steel (CrNi)                                        |  |
| Contact material            | Electrolytic copper (E <sub>Cu</sub> )                                   |  |
| Contact plating             | Tin                                                                      |  |
| Fire load                   | 0.544 MJ                                                                 |  |
| Weight                      | 30.4 g                                                                   |  |

| Environmental requirements |                 |  |
|----------------------------|-----------------|--|
| Limit temperature range    | -60 ... +100 °C |  |
| Processing temperature     | -35 ... +60 °C  |  |

| Commercial data       |                        |  |
|-----------------------|------------------------|--|
| Product Group         | 3 (Multi Conn. System) |  |
| eCl@ss 10.0           | 27-44-03-09            |  |
| eCl@ss 9.0            | 27-44-03-09            |  |
| ETIM 8.0              | EC002638               |  |
| ETIM 7.0              | EC002638               |  |
| PU (SPU)              | 10 pcs                 |  |
| Packaging type        | Box                    |  |
| Country of origin     | DE                     |  |
| GTIN                  | 4044918264846          |  |
| Customs tariff number | 85366930000            |  |

| Environmental Product Compliance |                         |  |
|----------------------------------|-------------------------|--|
| RoHS Compliance Status           | Compliant, No Exemption |  |

Approvals / Certificates

General approvals



| Approval                              | Standard  | Certificate Name |
|---------------------------------------|-----------|------------------|
| CB<br>DEKRA Certification B.V.        | IEC 61984 | NL-39756/A1      |
| CSA<br>DEKRA Certification B.V.       | C22.2     | 1466354          |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 61984  | 71-121453        |
| UL<br>Underwriters Laboratories Inc.  | UL 1977   | E45171           |

General approvals

|                                |         |        |
|--------------------------------|---------|--------|
| UL                             | UL 1059 | E45172 |
| Underwriters Laboratories Inc. |         |        |



Declarations of conformity and manufacturer's declarations



| Approval                      | Standard | Certificate Name |
|-------------------------------|----------|------------------|
| Railway<br>WAGO GmbH & Co. KG | -        | Railway Ready    |

Approvals for marine applications



| Approval                                | Standard  | Certificate Name |
|-----------------------------------------|-----------|------------------|
| ABS<br>American Bureau of Ship-<br>ping | -         | 19-HG1869876-PDA |
| DNV<br>DNV GL SE                        | -         | TAE000016Z       |
| LR<br>Lloyds Register                   | IEC 61984 | 96/20035 (E5)    |

Downloads

Environmental Product Compliance

|                                             |
|---------------------------------------------|
| Compliance Search                           |
| Environmental Product<br>Compliance 721-620 |



Documentation

|                        |
|------------------------|
| Additional Information |
| Technical Section      |
| 03.04.2019             |
| pdf<br>2027.26 KB      |



CAD/CAE-Data

|                      |
|----------------------|
| CAD data             |
| 2D/3D Models 721-620 |



|                              |
|------------------------------|
| CAE data                     |
| EPLAN Data Portal<br>721-620 |
| ZUKEN Portal 721-620         |



1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



**Item No.: 722-120/026-000**  
1-conductor female connector, angled;  
CAGE CLAMP®; 2.5 mm²; Pin spacing 5  
mm; 20-pole; 100% protected against  
mismatching; 2,50 mm²; light gray



**Item No.: 722-220/026-000**  
1-conductor female connector, angled;  
CAGE CLAMP®; 2.5 mm²; Pin spacing 5  
mm; 20-pole; 100% protected against  
mismatching; 2,50 mm²; light gray



**Item No.: 721-320/031-000**  
1-conductor female connector, angled;  
CAGE CLAMP®; 2.5 mm²; Pin spacing 5  
mm; 20-pole; 100% protected against  
mismatching; clamping collar; 2,50 mm²;  
light gray



**Item No.: 721-320/008-000**  
1-conductor female connector, angled;  
CAGE CLAMP®; 2.5 mm²; Pin spacing 5  
mm; 20-pole; 100% protected against  
mismatching; Snap-in mounting feet; 2,50  
mm²; light gray



**Item No.: 721-120/026-000**  
1-conductor female connector; CAGE  
CLAMP®; 2.5 mm²; Pin spacing 5 mm; 20-  
pole; 100% protected against mismatching;  
2,50 mm²; light gray



**Item No.: 721-120/027-000**  
1-conductor female connector; CAGE  
CLAMP®; 2.5 mm²; Pin spacing 5 mm; 20-  
pole; 100% protected against mismatching;  
clamping collar; 2,50 mm²; light gray



**Item No.: 721-120/031-000**  
1-conductor female connector; CAGE  
CLAMP®; 2.5 mm²; Pin spacing 5 mm; 20-  
pole; 100% protected against mismatching;  
clamping collar; 2,50 mm²; light gray



**Item No.: 721-120/037-000**  
1-conductor female connector; CAGE  
CLAMP®; 2.5 mm²; Pin spacing 5 mm; 20-  
pole; 100% protected against mismatching;  
Lateral locking levers; 2,50 mm²; light  
gray



1.1.1 Female connector/socket

|                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br><b>Item No.: 721-120/008-000/037-000</b><br>1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 20-pole; 100% protected against mismatching; Lateral locking levers; Snap-in mounting feet; 2,50 mm²; light gray | <br><b>Item No.: 721-120/008-000</b><br>1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 20-pole; 100% protected against mismatching; Snap-in mounting feet; 2,50 mm²; light gray             | <br><b>Item No.: 2721-120/026-000</b><br>1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 20-pole; 100% protected against mismatching; 2,50 mm²; light gray | <br><b>Item No.: 2721-120/031-000</b><br>1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 20-pole; 100% protected against mismatching; clamping collar; 2,50 mm²; light gray |
| <br><b>Item No.: 2721-120/008-000</b><br>1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 20-pole; 100% protected against mismatching; Snap-in mounting feet; 2,50 mm²; light gray           | <br><b>Item No.: 722-250/005-000/039-000</b><br>Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Locking lever; Pin spacing 5 mm; 20-pole; light gray | <br><b>Item No.: 722-250/005-000</b><br>Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Pin spacing 5 mm; 20-pole; light gray           | <br><b>Item No.: 722-150/005-000/039-000</b><br>Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismatching; Locking lever; Pin spacing 5 mm; 20-pole; light gray   |
| <br><b>Item No.: 722-150/005-000</b><br>Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismatching; Pin spacing 5 mm; 20-pole; light gray                                          | <br><b>Item No.: 722-250</b><br>THT female header; angled; Pin spacing 5 mm; 20-pole; 100% protected against mismatching; 0.6 x 1.0 mm solder pin; light gray                                                      | <br><b>Item No.: 722-250/031-000</b><br>THT female header; angled; Pin spacing 5 mm; 20-pole; 100% protected against mismatching; clamping collar; 0.6 x 1.0 mm solder pin; light gray                | <br><b>Item No.: 722-250/039-000</b><br>THT female header; angled; Pin spacing 5 mm; 20-pole; 100% protected against mismatching; Locking lever; 0.6 x 1.0 mm solder pin; light gray                                   |
| <br><b>Item No.: 722-250/047-000</b><br>THT female header; angled; Pin spacing 5 mm; 20-pole; 100% protected against mismatching; Spacer flange; 0.6 x 1.0 mm solder pin; light gray                                                   | <br><b>Item No.: 722-150</b><br>THT female header; straight; Pin spacing 5 mm; 20-pole; 100% protected against mismatching; 0.6 x 1.0 mm solder pin; light gray                                                    | <br><b>Item No.: 722-150/031-000</b><br>THT female header; straight; Pin spacing 5 mm; 20-pole; 100% protected against mismatching; clamping collar; 0.6 x 1.0 mm solder pin; light gray              | <br><b>Item No.: 722-150/039-000</b><br>THT female header; straight; Pin spacing 5 mm; 20-pole; 100% protected against mismatching; Locking lever; 0.6 x 1.0 mm solder pin; light gray                                 |
| <br><b>Item No.: 722-150/047-000</b><br>THT female header; straight; Pin spacing 5 mm; 20-pole; 100% protected against mismatching; Spacer flange; 0.6 x 1.0 mm solder pin; light gray                                               |                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                           |

1.2 Optional Accessories

1.2.1 Coding

1.2.1.1 Coding

|                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br><b>Item No.: 231-129</b><br>Coding key; snap-on type; light gray |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|

1.2.2 Cover

1.2.2.1 Cover

|                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br><b>Item No.: 231-668</b><br>Lockout caps; for covering unused clamping units; gray |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



1.2.3 Ferrule

1.2.3.1 Ferrule

|                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br><b>Item No.: 216-301</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow                                                                         | <br><b>Item No.: 216-321</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow                                                                     | <br><b>Item No.: 216-151</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated                                                                                           | <br><b>Item No.: 216-131</b><br>Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored                                                               |
| <br><b>Item No.: 216-302</b><br>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise                                                                | <br><b>Item No.: 216-322</b><br>Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise                                                            | <br><b>Item No.: 216-132</b><br>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated                                                                                           | <br><b>Item No.: 216-152</b><br>Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated                                                                               |
| <br><b>Item No.: 216-241</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white   | <br><b>Item No.: 216-201</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white                                                                       | <br><b>Item No.: 216-221</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white                                                                                       | <br><b>Item No.: 216-141</b><br>Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92          |
| <br><b>Item No.: 216-101</b><br>Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored                                                               | <br><b>Item No.: 216-121</b><br>Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored                                                           | <br><b>Item No.: 216-242</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray               | <br><b>Item No.: 216-262</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray   |
| <br><b>Item No.: 216-202</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray                                                                          | <br><b>Item No.: 216-222</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray                                                                      | <br><b>Item No.: 216-142</b><br>Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92                  | <br><b>Item No.: 216-102</b><br>Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored                                                              |
| <br><b>Item No.: 216-122</b><br>Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored                                                             | <br><b>Item No.: 216-243</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red | <br><b>Item No.: 216-263</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red                 | <br><b>Item No.: 216-203</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red                                                                             |
| <br><b>Item No.: 216-223</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red                                                                             | <br><b>Item No.: 216-103</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated                                                                            | <br><b>Item No.: 216-143</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92                    | <br><b>Item No.: 216-123</b><br>Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; silver-colored                                                                |
| <br><b>Item No.: 216-204</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black                                                                         | <br><b>Item No.: 216-224</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black                                                                     | <br><b>Item No.: 216-244</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black             | <br><b>Item No.: 216-264</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black |
| <br><b>Item No.: 216-284</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black | <br><b>Item No.: 216-124</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated                                                                         | <br><b>Item No.: 216-144</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored | <br><b>Item No.: 216-104</b><br>Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; silver-colored                                                             |
| <br><b>Item No.: 216-106</b><br>Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; silver-colored                                                             |                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                         |



1.2.4 Insulation stop

1.2.4.1 Insulation stop



**Item No.: 231-670**  
Insulation stop; 0.08-0.2 mm² / 0.2 mm²  
"s"; white



**Item No.: 231-671**  
Insulation stop; 0.25 - 0.5 mm²; light gray



**Item No.: 231-672**  
Insulation stop; 0.75 - 1 mm²; dark gray

1.2.5 Jumper

1.2.5.1 Jumper



**Item No.: 231-910**  
Jumper; for conductor entry; 10-way; insulated; gray



**Item No.: 231-902**  
Jumper; for conductor entry; 2-way; insulated; gray



**Item No.: 231-903**  
Jumper; for conductor entry; 3-way; insulated; gray



**Item No.: 231-905**  
Jumper; for conductor entry; 5-way; insulated; gray



**Item No.: 231-907**  
Jumper; for conductor entry; 7-way; insulated; gray

1.2.6 Marking

1.2.6.1 Marking strip



**Item No.: 210-331/500-103**  
Marking strips; as a DIN A4 sheet; MARKED; 1-12 (300x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/500-202**  
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/500-205**  
Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-331/500-104**  
Marking strips; as a DIN A4 sheet; MARKED; 13-24 (300x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/500-204**  
Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/500-206**  
Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.2.7 Tool

1.2.7.1 Operating tool



**Item No.: 231-231**  
Combination operating tool; red



**Item No.: 210-720**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



**Item No.: 210-657**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured



**Item No.: 280-440**  
Operating tool; made of insulating material; 10-way



**Item No.: 209-130**  
Operating tool; made of insulating material; 1-way; for 264 Series (1-1/2-way), 280, 281 Series (up to 3-way); natural



**Item No.: 231-291**  
Operating tool; made of insulating material; 1-way; loose; red



**Item No.: 231-131**  
Operating tool; made of insulating material; 1-way; loose; white



**Item No.: 280-432**  
Operating tool; made of insulating material; 2-way; white



**Item No.: 280-433**  
Operating tool; made of insulating material; 3-way



**Item No.: 280-434**  
Operating tool; made of insulating material; 4-way



**Item No.: 280-435**  
Operating tool; made of insulating material; 5-way; gray



**Item No.: 280-436**  
Operating tool; made of insulating material; 6-way

1.2.7.1 Operating tool



Item No.: 280-437  
Operating tool; made of insulating material; 7-way



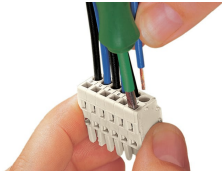
Item No.: 280-438  
Operating tool; made of insulating material; 8-way



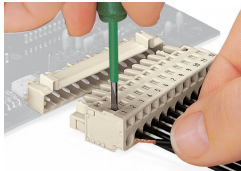
Item No.: 231-159  
Operating tool; natural

Installation Notes

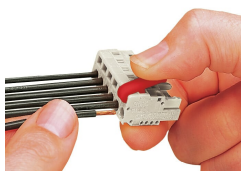
Conductor termination



Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.



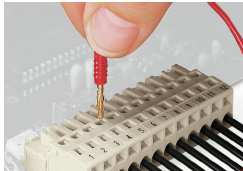
Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



Inserting a conductor via operating tool.



Testing



Testing perpendicular to conductor entry with 2 or 2.3 mm Ø test plug – female connector with CAGE CLAMP® – via integrated test ports

Installation

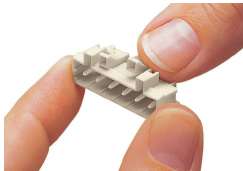


Male connector with strain relief plate



Strain relief housing shown with a male connector equipped with CAGE CLAMP®

Coding



Coding a male header – fitting coding key(s).