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

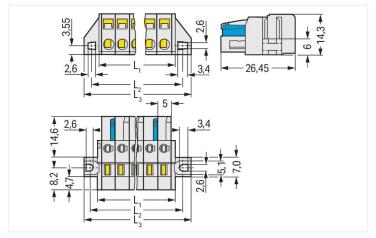


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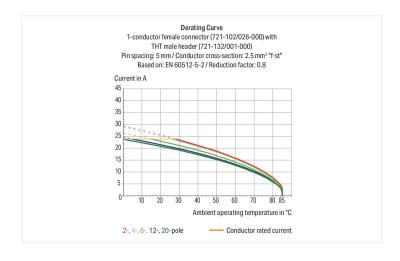
Color: Ilight gray

Similar to illustration



#### Dimensions in mm

- L1 = (pole no. x pin spacing) + 3 mm
- L2 = (pole no. x pin spacing) + 8.8 mm
- L3 = (pole no. x pin spacing) + 14.8 mm
- 2-pole female connectors one latch only



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- Integrated test ports
- 100% protected against mismating
- · Coding option available

N	otes

Safety information

Variants:

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.

Other pole numbers

Gold-plated or partially gold-plated contact surfaces

Other versions (or variants) can be requested from WAGO Sales or configured at https://configurator.wago.com/.



Electrical data			
Ratings per	IE	C/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	16 A	16 A	16 A

Approvals per		UL 1059	
Use group	В	С	D
Rated voltage	300 V	-	300 V
Rated current	15 A	-	10 A

Ratings	
Approvals per	UL 1977
Rated voltage	600 V
Rated current	15 A

Approvals per		CSA	
Use group	В	С	D
Rated voltage	300 V	-	300 V
Rated current	15 A	-	10 A

Connection data		
Connection points	2	
Total number of potentials	2	
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 mm <sup>2</sup>
Fine-stranded conductor; with uninsulated ferrule	0.25 2.5 mm <sup>2</sup>
Strip length	8 9 mm / 0.31 0.35 inches
Pole number	2
Conductor entry direction to mating direction	0°

Physical data	
Pin spacing	5 mm / 0.197 inches
Width	24.8 mm / 0.976 inches
Height	14.3 mm / 0.563 inches
Depth	26.45 mm / 1.041 inches

Mechanical data	
Variable coding	Yes
Mounting type	Mounting flange Feed-through mounting Panel mounting
Anti-rotation protection	Yes

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# Plug-in connection Contact type (pluggable connector) Female connector/socket Connector (connection type) for conductor Mismating protection Yes

Material data	
Note (material data)	
	<u>Information on material specifications can be found here</u>
Color	light gray
Material group	1
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	Tin
Fire load	0.079 MJ
Weight	4.6 g

Environmental requirements	
Limit temperature range	-60 +85 °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)	100 pcs
Packaging type	Вох
Country of origin	DE
GTIN	4044918353052
Customs tariff number	85366990990

Environmental Product Compliance	
RoHS Compliance Status	Compliant,No Exemption

# Approvals / Certificates

# General approvals







Approval	Standard	Certificate Name
CSA DEKRA Certification B.V.	C22.2	1466354
UL Underwriters Laboratories Inc.	UL 1977	E45171
UL Underwriters Laboratories Inc.	UL 1059	E45172

# Declarations of conformity and manufacturer's declarations



	Approval	Standard	Certificate Name
Railway - Railway Ready WAGO GmbH & Co. KG	Railway WAGO GmbH & Co. KG	-	Railway Ready

https://www.wago.com/721-102/031-000



#### Approvals for marine applications







VERITAS		
Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	19-HG1869876-PDA
BV Bureau Veritas S.A.	IEC 60998	11915/D0 BV
DNV DNV GL SE	-	TAE000016Z

# Downloads

### **Environmental Product Compliance**

# Compliance Search

**Environmental Product** Compliance 721-102/031-000



#### Documentation

# Additional Information

Technical Section

pdf 03.04.2019

2027.26 KB



### CAD/CAE-Data

#### CAD data

2D/3D Models 721-102/031-000



# CAE data

**EPLAN Data Portal** 721-102/031-000



721-102/031-000



### 1 Compatible Products

### 1.1 System counterpart

### 1.1.1 Male connector/plug





# Item No.: 721-602

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



#### Item No.: 721-432/001-000

THT male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismating; Pin spacing 5 mm; 2-pole; light gray



#### Item No.: 721-132/001-000

THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismating; Pin spacing 5 mm; 2-pole; light gray



#### 1.2 Optional Accessories

#### 1.2.1 Cover

#### 1.2.1.1 Cover





#### Item No.: 231-668

Lockout caps; for covering unused clamping units; gray

#### Item No.: 231-669

Lockout caps; for covering unused clamping units; orange

#### 1.2.2 Ferrule

#### 1.2.2.1 Ferrule

Item No.: 216-301
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow

#### Item No.: 216-321

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow

#### Item No.: 216-151

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated

#### Item No.: 216-131

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-co-

#### Item No.: 216-302

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise

#### Item No.: 216-322

Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise

#### Item No.: 216-132

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated

#### Item No.: 216-152

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated

#### Item No.: 216-241

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white

#### Item No.: 216-201

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white

#### Item No.: 216-221

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white

#### Item No.: 216-141

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

#### Item No.: 216-101

Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored

#### Item No.: 216-121

Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored

# Item No.: 216-242

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

#### Item No.: 216-262

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

#### Item No.: 216-202

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray

#### Item No.: 216-222

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray

#### Item No.: 216-142

Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

#### Item No.: 216-102

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-co-lored

# Item No.: 216-122

Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-co-lored

#### Item No.: 216-243

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

# Item No.: 216-263

Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red

# Item No.: 216-203

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red

# Item No.: 216-223

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red

# Item No.: 216-103

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated

#### Item No.: 216-143

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

#### Item No.: 216-123

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored

Item No.: 216-204

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black

#### Item No.: 216-224

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black

# Item No.: 216-244

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

# Item No.: 216-264

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

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#### 1.2.2.1 Ferrule

I

#### Item No.: 216-284

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

#### Item No.: 216-124

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated

#### Item No.: 216-144

Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored

#### Item No.: 216-104

Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; silver-colored

#### Item No.: 216-106

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; uninsulated; electro-tin plated; silver-colored

#### 1.2.3 Insulation stop

#### 1.2.3.1 Insulation stop







#### Item No.: 231-670

Insulation stop; 0.08-0.2 mm<sup>2</sup> / 0.2 mm<sup>2</sup> "s"; white

#### Item No.: 231-671

Insulation stop; 0.25 - 0.5 mm²; light gray

#### Item No.: 231-672

Insulation stop; 0.75 - 1 mm<sup>2</sup>; dark gray

# 1.2.4 Jumper

#### 1.2.4.1 Jumper



# Item No.: 231-902

Jumper; for conductor entry; 2-way; insulated; gray

# 1.2.5 Marking

#### 1.2.5.1 Marking strip

# Item No.: 210-331/500-103

Marking strips; as a DIN A4 sheet; MAR-KED; 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; MAR-KED; 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; MAR-KED; 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; MAR-KED; 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; MAR-KED; 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; MAR-KED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

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### 1.2.6 Strain relief

### 1.2.6.1 Strain relief housing



#### Item No.: 232-602

Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 2-pole; gray

#### 1.2.7 Test and measurement

### 1.2.7.1 Testing accessories





#### Item No.: 210-136

Test plug; 2 mm Ø; with 500 mm cable; red

#### Item No.: 231-661

Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing; 2,50 mm²; light gray

#### 1.2.8 Tool

### 1.2.8.1 Operating tool









#### Item No.: 209-132

Operating tool; for connecting comb-style jumper bar; made of insulating material; 2-way; natural



Operating tool; made of insulating material; 1-way; for 264 Series (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

#### **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.

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# Coding



Coding a female connector by removing coding finger(s).

# 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®

Subject to changes. Please also observe the further product documentation!

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