1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9-pole; 100% protected against mismating; 2,50 mm²; light gray

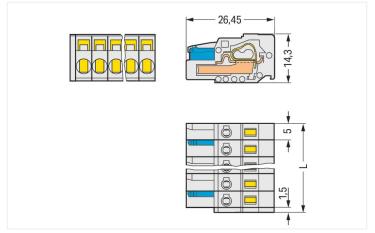


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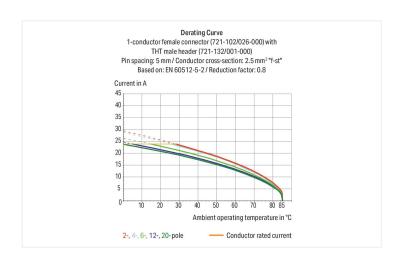


Similar to illustration



Dimensions in mm

L = (pole no. x pin spacing) + 1.5 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

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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	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	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

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	9	Connection 1	
Total number of potentials	9	Connection technology	CAGE CLAMP®
Number of connection types	1	Actuation type	Operating tool
Number of levels	1	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	9
		Conductor entry direction to mating di-	0°

Physical data	
Pin spacing	5 mm / 0.197 inches
Width	46.5 mm / 1.831 inches
Height	14.3 mm / 0.563 inches
Depth	26.45 mm / 1.041 inches

rection

Mechanical data	
Variable coding	Yes
Anti-rotation protection	Yes

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

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Material data	
Note (material data)	<a href="https://www.wago.com/us/material-specifications">Information on material</a>
	specifications can be found here
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	Copper alloy
Contact plating	Tin
Fire load	0.226 MJ
Weight	16.6 g

<b>Environmental requirements</b>	Env	/ironm	ental	requirements
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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)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918354998
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 WAGO GmbH & Co. KG	-	Railway Ready

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#### Approvals for marine applications







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 721-109/026-000



#### **Documentation**

#### Additional Information

**Technical Section** 

pdf 03.04.2019 2010.85 KB

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#### CAD/CAE-Data

#### CAD data

2D/3D Models 721-109/026-000



# CAE data

EPLAN Data Portal 721-109/026-000



721-109/026-000



#### 1 Compatible Products

#### 1.1 System counterpart

# 1.1.1 Male connector/plug



# Item No.: 721-609

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9pole; 100% protected against mismating; 2,50 mm²; light gray



#### Item No.: 721-609/019-000

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9pole; 100% protected against mismating; clamping collar; 2,50 mm²; light gray



#### Item No.: 721-609/018-000

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9pole; 100% protected against mismating; DIN-35 rail/panel mounting; Snap-in mounting feet; 2,50 mm²; light gray



#### Item No.: 721-609/000-034

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9pole; 100% protected against mismating; direct marking; 2,50 mm²; light gray



# Item No.: 721-609/000-044

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9pole; 100% protected against mismating; direct marking; 2,50 mm²; light gray



# Item No.: 721-609/114-000

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9pole; 100% protected against mismating; Snap-in flange; 2,50 mm²; light gray



# Item No.: 721-169/003-000

Male connector for rail-mount terminal blocks; 1.2 x 1.2 mm pins; straight; 100% protected against mismating; Pin spacing 5 mm; 9-pole; light gray



# Item No.: 721-439/001-000

THT male header; 1.0 x 1.0 mm solder pin; angled; 100% protected against mismating; Pin spacing 5 mm; 9-pole; light gray

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#### 1.1.1 Male connector/plug



#### Item No.: 721-139/001-000

THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mismating; Pin spacing 5 mm; 9-pole; light gray



THT male header; 1.2 x 1.2 mm solder pin; angled; 100% protected against mismating; Pin spacing 5 mm; 9-pole; light gray

# Item No.: 721-169/001-000

THT male header; 1.2 x 1.2 mm solder pin; straight; 100% protected against mismating; Pin spacing 5 mm; 9-pole; light gray

# Item No.: 721-169/046-000

THT male header; 1.2 x 1.2 mm solder pin; straight; 100% protected against mismating; Pin spacing 5 mm; 9-pole; light gray

# 1.2 Optional Accessories

#### 1.2.1 Cover

#### 1.2.1.1 Cover



#### Item No.: 231-668 Item No.: 231-669

Lockout caps; for covering unused clamping units; gray

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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored

# Item No.: 216-121

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored

# Item No.: 216-242

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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 mm<sup>2</sup> / 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-colored

Item No.: 216-122 Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored

#### 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 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.: 216-203

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

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#### 1.2.2.1 Ferrule

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



### 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 mm<sup>2</sup>; 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

#### 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

#### 1.2.5 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.: 232-609

Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 9-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



Operating tool; made of insulating materi-

# 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

# Item No.: 280-437

Item No.: 280-433

al; 3-way

Operating tool; made of insulating material; 7-way

#### Item No.: 280-438

Operating tool; made of insulating material; 8-way

# 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!