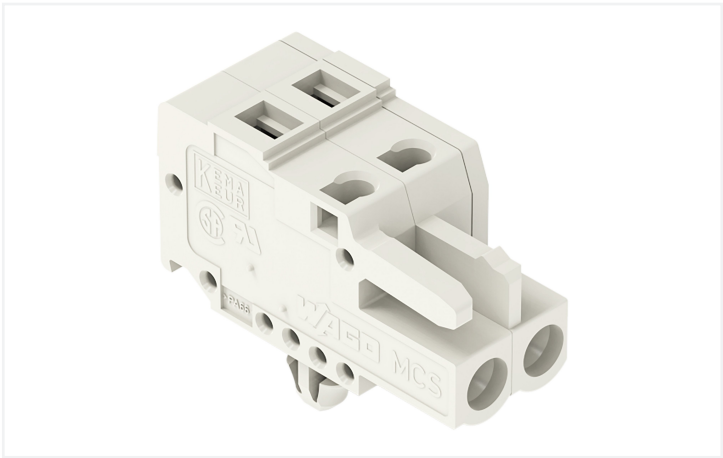


Data Sheet | Item Number: 721-109/008-045

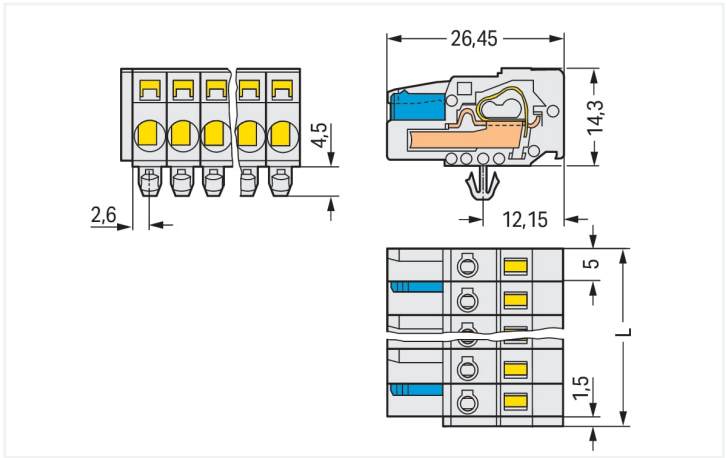
1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9-pole;
100% protected against mismating; Snap-in mounting feet; direct marking; 2,50
mm²; light gray

<https://www.wago.com/721-109/008-045>



Color: ■ light gray

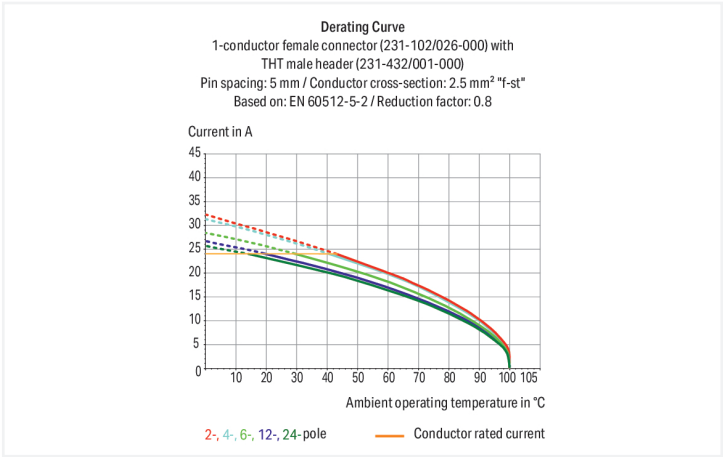
Similar to illustration



Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 1.5 \text{ mm}$

2-pole female connectors – one latch only



Federleiste/Buchse Serie 721 mit 0 ° Leiterabgang zur Steckrichtung

Die Federleiste/Buchse mit der Artikelnummer 721-109/008-045 ermöglicht eine ordentliche Elektroinstallation. Unsere Leiterplatten-Steckverbinder gewähren Ihnen die größtmögliche Flexibilität bei verschiedenen Montagearten. Diese Federleiste/Buchse benötigt für den Leiteranschluss eine Abisolierung mit Längen zwischen 8 und 9 mm. Dieses Produkt ist mit der CAGE CLAMP®-Technologie ausgerüstet. Mit dem CAGE CLAMP® Universalanschluss steht Ihnen eine zuverlässige und wartungsfreie Anschluss Technik zur Verfügung, um sämtliche Leiterarten mithilfe einer Käfigzugfeder anzuschließen. Es ist keine Vorbehandlung der Leiter notwendig, beispielsweise durch das Aufcrimpen von Aderendhülsen. Die Maße sind in Breite x Höhe x Tiefe (46,5 x 18,8 x 26,45) mm. Diese Federleiste/Buchse ist in Abhängigkeit von der Leiterart für Leiterquerschnitte von 0,08 mm² bis 2,5 mm² geeignet. Die Oberfläche der Kontakte ist aus Zinn. Für diese Federleiste/Buchse erfolgt die Betätigung per Betätigungswerkzeug. Das "Multi Connection System" – MCS von WAGO ist das vielfältige Steckverbindersystem mit überzeugenden Lösungen für Ihre Anwendungen.

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 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				Approvals per UL 1059			
Overvoltage category	III	III	II	Use group	B	C	D
Pollution degree	3	2	2	Rated voltage	300 V	-	300 V
Nominal voltage	320 V	320 V	630 V	Rated current	15 A	-	10 A
Rated surge voltage	4 kV	4 kV	4 kV				
Rated current	16 A	16 A	16 A				

Ratings				Approvals per CSA			
Approvals per	UL 1977			Use group	B	C	D
Rated voltage	600 V			Rated voltage	300 V	-	300 V
Rated current	15 A			Rated current	15 A	-	10 A

Connection data

Clamping units	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 mm²
		Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm²
		Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
		Pole number	9
		Conductor entry direction to mating direction	0 °

Physical data

Pin spacing	5 mm / 0.197 inches
Width	46.5 mm / 1.831 inches
Height	18.8 mm / 0.74 inches
Height from the surface	14.3 mm / 0.563 inches
Depth	26.45 mm / 1.041 inches
Drilled hole diameter for snap-in mounting foot with tolerance	3.5 (+0.1) mm

Mechanical data

Variable coding	Yes
Housing sheet thickness	0.6 ... 1.2 mm / 0.024 ... 0.047 inches
Mounting type	Snap-in foot Panel mounting
Anti-rotation protection	Yes



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

Material data	
Note (material data)	Information on material specifications can be found here
Color	light gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper alloy
Contact Plating	Tin
Fire load	0.242 MJ
Weight	16.6 g

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

Commercial data	
eCl@ss 10.0	27-44-03-09
eCl@ss 9.0	27-44-03-09
ETIM 9.0	EC002638
ETIM 8.0	EC002638
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143312950
Customs tariff number	85366990990

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

General approvals			Approvals for marine applications		
					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CSA CSA Group	C22.2	1466354	BV Bureau Veritas S.A.	IEC 60998	11915/D0 BV
UL Underwriters Laboratories Inc.	UL 1977	E45171			



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance721-109/008-045

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Documentation

Additional Information

Technical Section03.04.2019pdf2027.26 KB

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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; 9-pole; 100% protected against mismatching; 2,50 mm²; 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.: 216-302

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



Item No.: 216-201

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white



Item No.: 216-241

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



Item No.: 216-141

Ferrule; Sleeve for 0.5 mm² / 20 AWG; un-insulated; 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; un-insulated; 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



1.2.2.1 Ferrule

 Item No.: 216-202 Ferrule; Sleeve for 0.75 mm² / 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 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored	 Item No.: 216-243 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.: 216-263 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 mm² / AWG 18; insulated; electro-tin plated; red	 Item No.: 216-103 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated	 Item No.: 216-143 Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92
 Item No.: 216-204 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black	 Item No.: 216-244 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.: 216-264 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.: 216-284 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.: 216-144 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 mm² / AWG 14; uninsulated; electro-tin plated; silver-colored	

1.2.3 Installation

1.2.3.1 Mounting accessories

 Item No.: 209-137 Mounting adapter; can be used as end stop; 6.5 mm wide; gray

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
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1.2.5 Jumper

1.2.5.1 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
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1.2.6 Mounting adapter

1.2.6.1 Mounting accessories



Item No.: 209-148
Multi mounting adapter; for female and male connectors; 25 mm wide; 3 parts; gray

1.2.7 Strain relief

1.2.7.1 Strain relief housing



Item No.: 232-609
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 9-pole; gray

1.2.8 Test and measurement

1.2.8.1 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

1.2.9 Tool

1.2.9.1 Operating tool



Item No.: 209-132
Operating tool; for connecting comb-style jumper bar; made of insulating material; 2-way; natural



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; white



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



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; white



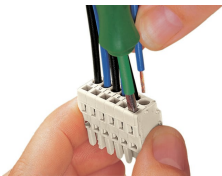
Item No.: 280-437
Operating tool; made of insulating material; 7-way; white



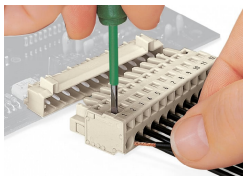
Item No.: 280-438
Operating tool; made of insulating material; 8-way; white

Installation Notes

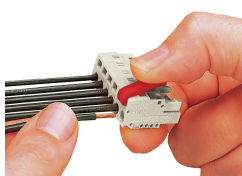
Conductor termination



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.

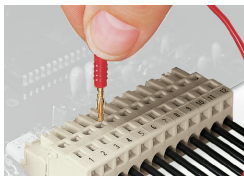


Coding



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®