

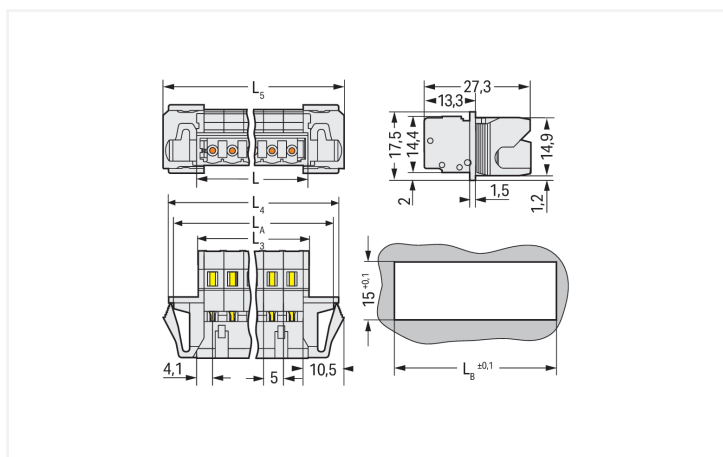
Data Sheet | Item Number: 721-612/114-000

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 12-pole; 100% protected against mismating; Snap-in flange; 2,50 mm²; light gray

<https://www.wago.com/721-612/114-000>



Color: ■ light gray



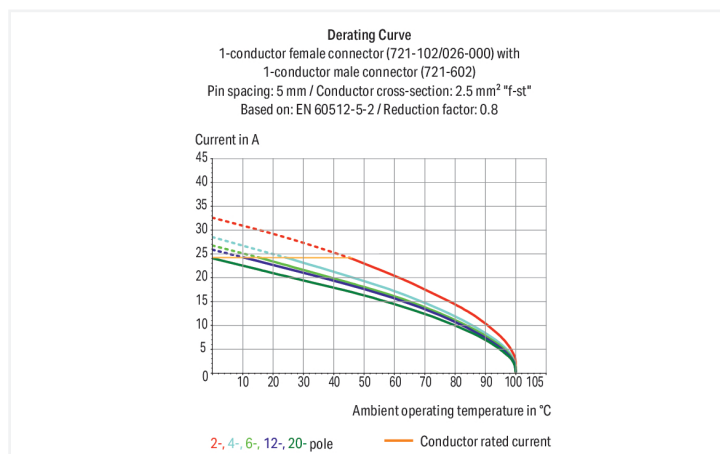
Dimensions in mm

$L = (\text{pole no.} \times \text{pin spacing}) + 3.2 \text{ mm}$
 $L_3 = L - 0.2 \text{ mm}$
 $L_4 = L_3 + 15.2 \text{ mm}$
 $L_5 = L_3 + 18 \text{ mm}$
 $L_6 = L_3 + 12.6 \text{ mm}$
 $L_7 = L_3 + 13.2 \text{ mm}$

Male connector, 721 Series, operating tool

This male connector (item number 721-612/114-000) is designed for hassle-free electrical installations. Strip lengths must be between 8 and 9 mm when connecting conductors to this male connector. This product features one conductor terminal and utilizes CAGE CLAMP®. Our reliable and maintenance-free CAGE CLAMP® connection makes it easy to connect all types of conductors without having to prepare the conductor. For example, you don't need to crimp ferrules. The item's dimensions are (81 x 17.5 x 27.5) mm (width x height x depth). Depending on the conductor type, this male connector is designed for conductor cross sections ranging from 0.08 mm² to 2.5 mm².

The contact surface is coated with tin.



Notes	
Safety Information	The MCS – <i>MULTI CONNECTION SYSTEM</i> 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		
Overvoltage category		III	III	II
Pollution degree		3	2	2
Nominal voltage		320 V	320 V	630 V
Rated impulse withstand 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																								
Clamping units	12	Connection 1 <table><tr><td>Connection technology</td><td>CAGE CLAMP®</td></tr><tr><td>Actuation type</td><td>Operating tool</td></tr><tr><td>Actuation direction 1</td><td>Operation parallel to conductor entry</td></tr><tr><td>Actuation direction 2</td><td>Operation perpendicular to conductor entry</td></tr><tr><td>Solid conductor</td><td>0.08 ... 2.5 mm² / 28 ... 12 AWG</td></tr><tr><td>Fine-stranded conductor</td><td>0.08 ... 2.5 mm² / 28 ... 12 AWG</td></tr><tr><td>Fine-stranded conductor; with insulated ferrule</td><td>0.25 ... 1.5 mm²</td></tr><tr><td>Fine-stranded conductor; with uninsulated ferrule</td><td>0.25 ... 2.5 mm²</td></tr><tr><td>Strip length</td><td>8 ... 9 mm / 0.31 ... 0.35 inches</td></tr><tr><td>Pole number</td><td>12</td></tr><tr><td>Conductor entry direction to mating direction</td><td>0 °</td></tr></table>	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	12	Conductor entry direction to mating direction	0 °
Connection technology	CAGE CLAMP®																							
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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	12																							
Conductor entry direction to mating direction	0 °																							
Total number of potentials	12																							
Number of connection types	1																							
Number of levels	1																							

Physical data	
Pin spacing	5 mm / 0.197 inches
Width	81 mm / 3.189 inches
Height	17.5 mm / 0.689 inches
Depth	27.5 mm / 1.083 inches



Mechanical data	
Variable coding	Yes
Housing sheet thickness	0.5 ... 3 mm / 0.02 ... 0.118 inches
Direct ground contact to DIN-rail/drilled hole/housing	No
Mounting type	Snap-in flange
Mounting type	Feed-through mounting
Anti-rotation protection	Yes
Suitable for through-panel applications	Yes

Plug-in connection	
Contact type (pluggable connector)	Male connector/plug
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	Electrolytic copper (E _{Cu})
Contact Plating	Tin
Fire load	0.342 MJ
Weight	20.5 g

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

Commercial data	
Product Group	3 (Multi Conn. System)
PU (SPU)	25 (18) pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821280330
Customs tariff number	85366930000

Product Classification	
UNSPSC	39121409
eCl@ss 10.0	27-44-03-09
eCl@ss 9.0	27-44-03-09
ETIM 9.0	EC002638
ETIM 10.0	EC002638
ECCN	NO US CLASSIFICATION



Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-113351
CSA DEKRA Certification B.V.	C22.2	1466354
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-130478 REV.1
UL Underwriters Laboratories Inc.	UL 1977	E45171
UL Underwriters Laboratories Inc.	UL 1059	E45172

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 721-612/114-000



Documentation

Additional Information
Technical Section
03.04.2019
pdf 2027.26 KB



CAD/CAE-Data

CAD data
2D/3D Models 721-612/114-000



CAE data
ZUKEN Portal 721-612/114-000



1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: 721-112/026-000
1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 12-pole; 100% protected against mismatching; 2,50 mm²; light gray

1.2 Optional Accessories

1.2.1 Coding

1.2.1.1 Coding



Item No.: 231-129
Coding key; snap-on type; light gray

1.2.2 Cover

1.2.2.1 Cover



Item No.: 231-668
Lockout caps; for covering unused clamping units; gray

1.2.3 Ferrule

1.2.3.1 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.: 216-101
Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored



Item No.: 216-202
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item No.: 216-102
Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; silver-colored



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.: 216-204
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



Item No.: 216-104
Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; 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 Strain relief

1.2.7.1 Strain relief housing



Item No.: 232-612
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 12-pole; gray

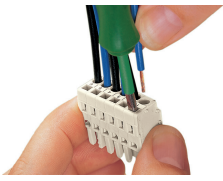
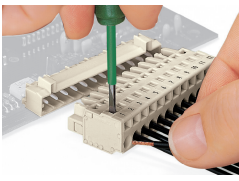
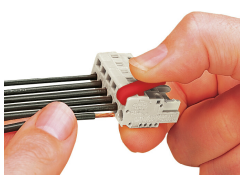
1.2.8 Tool

1.2.8.1 Operating tool

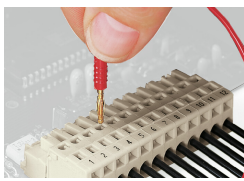
 Item No.: 231-231 Combination operating tool; red	 Item No.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured	 Item No.: 210-657 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multi-coloured	 Item No.: 280-440 Operating tool; made of insulating material; 10-way; white
 Item No.: 209-130 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
 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	 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.
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Testing

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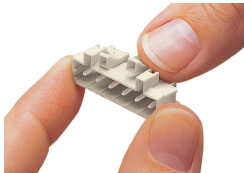
Installation



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).