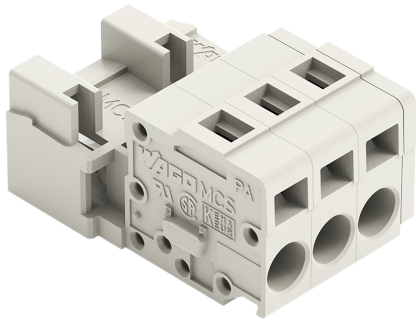


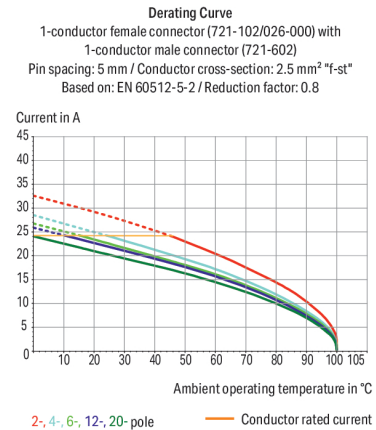
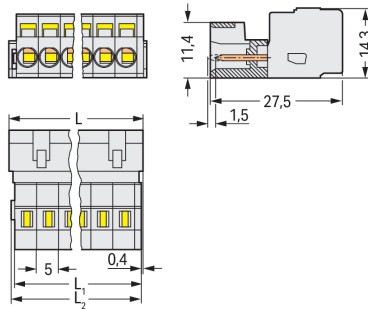
Data Sheet | Item Number: 721-603

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching; 2,50 mm²; light gray

<https://www.wago.com/721-603>



Color: ■ light gray



Dimensions in mm

$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$
 $L_2 = L - 1.7 \text{ mm}$
 $L_3 = L - 1.2 \text{ mm}$

Male connector, 721 Series, light gray

This male connector (item number 721-603) simplifies electrical installations. Ensure that the strip lengths are between 8 and 9 mm when connecting conductors to this male connector. Featuring one conductor terminal along with CAGE CLAMP®, this product is highly versatile. Our highly-rated and maintenance-free CAGE CLAMP® connection makes it easy to connect all conductor types without having to prepare the conductor. For example, you don't need to crimp ferrules. The dimensions are (18.2 x 14.3 x 27.5) mm (width x height x depth). Depending on the type of conductor, this male connector is suitable for conductor cross sections ranging from 0.08 mm² to 2.5 mm².

The contact surface is tin-coated

- The right solution for every wiring task
- Pin spacing: 5 mm
- Wide range of applications thanks to a conductor cross-section range from 0.08 to 2.5 mm²
- Actuation via operating tool
- 3 connection points



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	3
Total number of potentials	3
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	3
Conductor entry direction to mating direction	0 °

Physical data	
Pin spacing	5 mm / 0.197 inches
Width	18.2 mm / 0.717 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)	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	0.082 MJ
Weight	5 g

Environmental requirements	
Limit temperature range	-60 ... +100 °C
Processing temperature	-35 ... +60 °C
Environmental Testing	
Test specification: Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure: Railway applications – Rolling stock equipment – Vibration and shock tests	DIN EN 61373 (VDE 0115-0106):2011-04
Spectrum/Mounting location	Service life test, Category 1, Class A/B
Functional test with noise-like oscillations	Test passed according to Section 8 of the standard
Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz
Acceleration	0.101g (highest test level used for all axes)
Test duration per axis	10 min.
Test directions	X, Y and Z axes
Monitoring of contact faults and interruptions	Passed
Voltage drop measurement before and after each axis	Passed
Simulated service life test through increased levels of noise-like oscillations	Test passed according to Section 9 of the standard
Frequency	f ₁ = 5 Hz to f ₂ = 150 Hz
Acceleration	0.572g (highest test level used for all axes)
Test duration per axis	5 h
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Shock test	Test passed according to Section 10 of the standard
Shock pulse form	Half sine
Acceleration	5g (highest test level used for all axes)



Environmental Testing	
Shock duration	30 ms
Number of shocks (per axis)	3 pos. und 3 neg.
Test directions	X, Y and Z axes
Extended testing: Monitoring of contact faults and interruptions	Passed
Extended testing: Voltage drop measurement before and after each axis	Passed
Vibration and shock stress for rolling stock equipment	Passed

Commercial data	
Product Group	3 (Multi Conn. System)
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918261890
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

Declarations of conformity and manufacturer's declarations



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

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



Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	24-0095975-PDA
DNV DNV GL SE	-	TAE000016Z
LR Lloyds Register	IEC 61984	96/20035 (E5)
PRS Polski Rejestr Statków	-	TE/1095/880590/23

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 721-603



Documentation

Additional Information
Technical Section
03.04.2019
pdf 2027.26 KB



CAD/CAE-Data

CAD data
2D/3D Models 721-603



CAE data
EPLAN Data Portal 721-603
ZUKEN Portal 721-603



1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



Item No.: 722-103/026-000
1-conductor female connector; angled;
CAGE CLAMP®; 2,5 mm²; Pin spacing 5 mm;
3-pole; 100% protected against mismatching;
2,50 mm²; light gray



Item No.: 722-203/026-000
1-conductor female connector; angled;
CAGE CLAMP®; 2,5 mm²; Pin spacing 5 mm;
3-pole; 100% protected against mismatching;
2,50 mm²; light gray



Item No.: 721-303/031-000
1-conductor female connector; angled;
CAGE CLAMP®; 2,5 mm²; Pin spacing 5 mm;
3-pole; 100% protected against mismatching;
clamping collar; 2,50 mm²; light gray



Item No.: 721-303/008-000
1-conductor female connector; angled;
CAGE CLAMP®; 2,5 mm²; Pin spacing 5 mm;
3-pole; 100% protected against mismatching;
Snap-in mounting feet; 2,50 mm²; light gray



Item No.: 721-103/026-000
1-conductor female connector; CAGE
CLAMP®; 2,5 mm²; Pin spacing 5 mm; 3-pole;
100% protected against mismatching; 2,50
mm²; light gray



Item No.: 721-103/031-000
1-conductor female connector; CAGE
CLAMP®; 2,5 mm²; Pin spacing 5 mm; 3-
pole; 100% protected against mismatching;
clamping collar; 2,50 mm²; light gray



Item No.: 721-103/026-045
1-conductor female connector; CAGE
CLAMP®; 2,5 mm²; Pin spacing 5 mm; 3-
pole; 100% protected against mismatching; di-
rect marking; 2,50 mm²; light gray



Item No.: 721-103/037-000
1-conductor female connector; CAGE
CLAMP®; 2,5 mm²; Pin spacing 5 mm; 3-pole;
100% protected against mismatching; Lateral
locking levers; 2,50 mm²; light gray

1.1.1 Female connector/socket

**Item No.: 721-103/008-000**

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching; Snap-in mounting feet; 2,50 mm²; light gray

**Item No.: 721-103/008-045**

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching; Snap-in mounting feet; direct marking; 2,50 mm²; light gray

**Item No.: 721-103/124-000**

1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; Snap-in flange; 2,50 mm²; light gray

**Item No.: 2721-1103/326-000**

1-conductor female connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching, coding finger; 2,50 mm²; light gray

**Item No.: 2721-1103/031-000**

1-conductor female connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching, coding finger; clamping collar; light gray

**Item No.: 2721-1103/326-045**

1-conductor female connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching, coding finger; direct marking; light gray

**Item No.: 2721-1103/326-047**

1-conductor female connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching, coding finger; direct marking; light gray

**Item No.: 2721-1103/326-9037**

1-conductor female connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching, coding finger; direct marking; light gray

**Item No.: 2721-1103/037-000**

1-conductor female connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching, coding finger; Lateral locking levers; 2,50 mm²; light gray

**Item No.: 2721-1103/037-000/333-000**

1-conductor female connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching, coding finger; Lateral locking levers; Strain relief plate; light gray

**Item No.: 2721-1103/326-000/127-000**

1-conductor female connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching, coding finger; mounting foot flange; 2,50 mm²; light gray

**Item No.: 2721-1103/124-000**

1-conductor female connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching, coding finger; Snap-in flange; light gray

**Item No.: 2721-1103/326-000/333-000**

1-conductor female connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching, coding finger; Strain relief plate; light gray

**Item No.: 2721-103/026-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching; 2,50 mm²; light gray

**Item No.: 2721-103/031-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching; clamping collar; 2,50 mm²; light gray

**Item No.: 2721-103/037-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching; Lateral locking levers; 2,50 mm²; light gray

**Item No.: 2721-103/037-000/133-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching; Lateral locking levers; Strain relief plate; 2,50 mm²; light gray

**Item No.: 2721-103/008-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching; Snap-in mounting feet; 2,50 mm²; light gray

**Item No.: 2721-103/026-000/133-000**

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching; Strain relief plate; 2,50 mm²; light gray

**Item No.: 721-2103/037-000**

2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching; Lateral locking levers; 2,50 mm²; light gray

**Item No.: 721-2103/026-000**

2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 3-pole; 100% protected against mismatching; with integrated end plate; 2,50 mm²; light gray

**Item No.: 722-233/005-000/039-000**

Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Locking lever; Pin spacing 5 mm; 3-pole; light gray

**Item No.: 722-233/005-000**

Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; angled; 100% protected against mismatching; Pin spacing 5 mm; 3-pole; light gray

**Item No.: 722-133/005-000/039-000**

Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismatching; Locking lever; Pin spacing 5 mm; 3-pole; light gray

**Item No.: 722-133/005-000**

Female connector for rail-mount terminal blocks; 0.6 x 1 mm pins; straight; 100% protected against mismatching; Pin spacing 5 mm; 3-pole; light gray

**Item No.: 722-233**

THT female header; angled; Pin spacing 5 mm; 3-pole; 100% protected against mismatching; 0.6 x 1.0 mm solder pin; light gray

**Item No.: 722-233/031-000**

THT female header; angled; Pin spacing 5 mm; 3-pole; 100% protected against mismatching; clamping collar; 0.6 x 1.0 mm solder pin; light gray

**Item No.: 722-233/047-000**

THT female header; angled; Pin spacing 5 mm; 3-pole; 100% protected against mismatching; Spacer flange; 0.6 x 1.0 mm solder pin; light gray

**Item No.: 722-234/039-000**

THT female header; angled; Pin spacing 5 mm; 4-pole; 100% protected against mismatching; Locking lever; 0.6 x 1.0 mm solder pin; light gray

**Item No.: 722-133**

THT female header; straight; Pin spacing 5 mm; 3-pole; 100% protected against mismatching; 0.6 x 1.0 mm solder pin; light gray

**Item No.: 722-133/031-000**

THT female header; straight; Pin spacing 5 mm; 3-pole; 100% protected against mismatching; clamping collar; 0.6 x 1.0 mm solder pin; light gray

**Item No.: 722-133/039-000**

THT female header; straight; Pin spacing 5 mm; 3-pole; 100% protected against mismatching; Locking lever; 0.6 x 1.0 mm solder pin; light gray

**Item No.: 722-133/047-000**

THT female header; straight; Pin spacing 5 mm; 3-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



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.: 231-902
Jumper; for conductor entry; 2-way; insulated; gray



Item No.: 231-903
Jumper; for conductor entry; 3-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.: 232-603
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 3-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; multicoloured



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



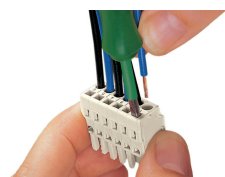
Item No.: 280-433
Operating tool; made of insulating material; 3-way; white



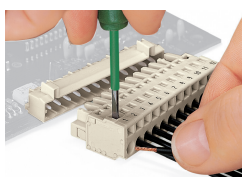
Item No.: 231-159
Operating tool; natural

Installation Notes

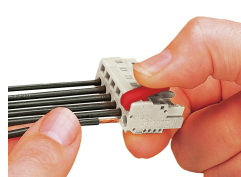
Conductor termination



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



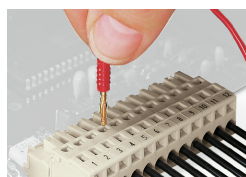
Inserting a conductor via 3.5 mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



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

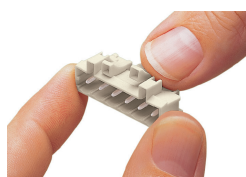


Male connector with strain relief plate



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

Coding



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