

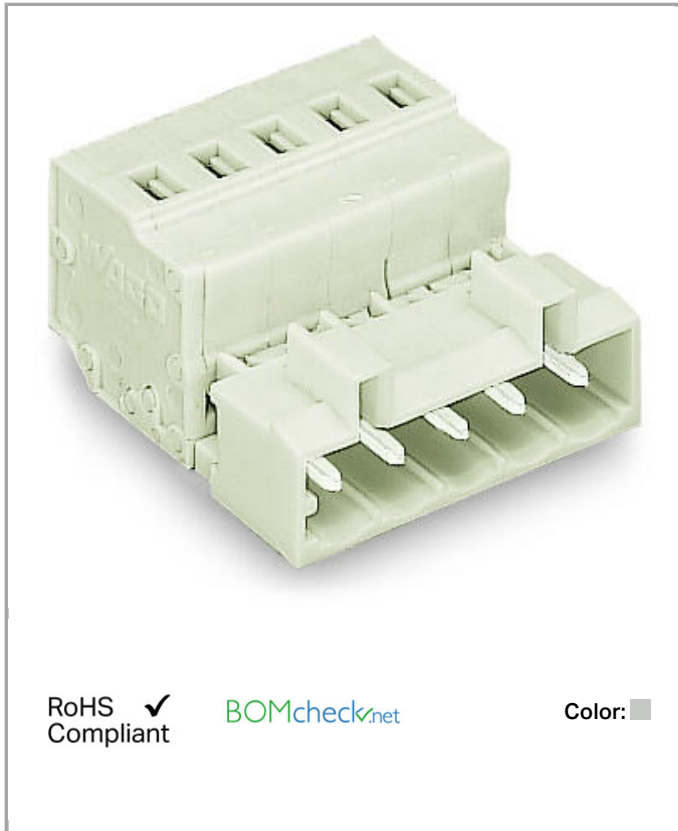
Data sheet | Item number: 721-612

1-conductor male connector; 100% protected against mismatching; 2.5 mm²;

Pin spacing 5 mm; 12-pole



721-612



RoHS
Compliant

BOMcheck.net

Color:

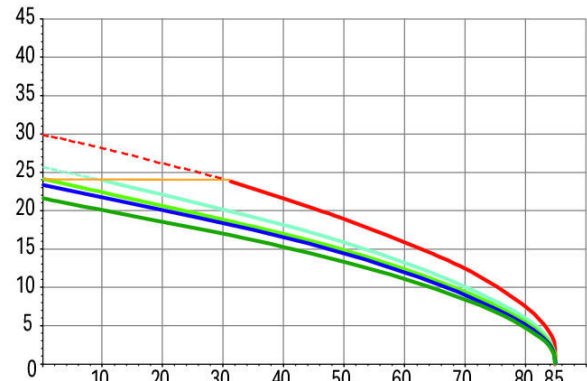
Derating Curve

1-conductor female connector (721-102/026-000) with
1-conductor male header (721-602)

Pin spacing: 5 mm / Conductor cross-section: 2.5 mm² "f-st"

Based on: EN 60512-5-2 / Reduction factor: 0.8

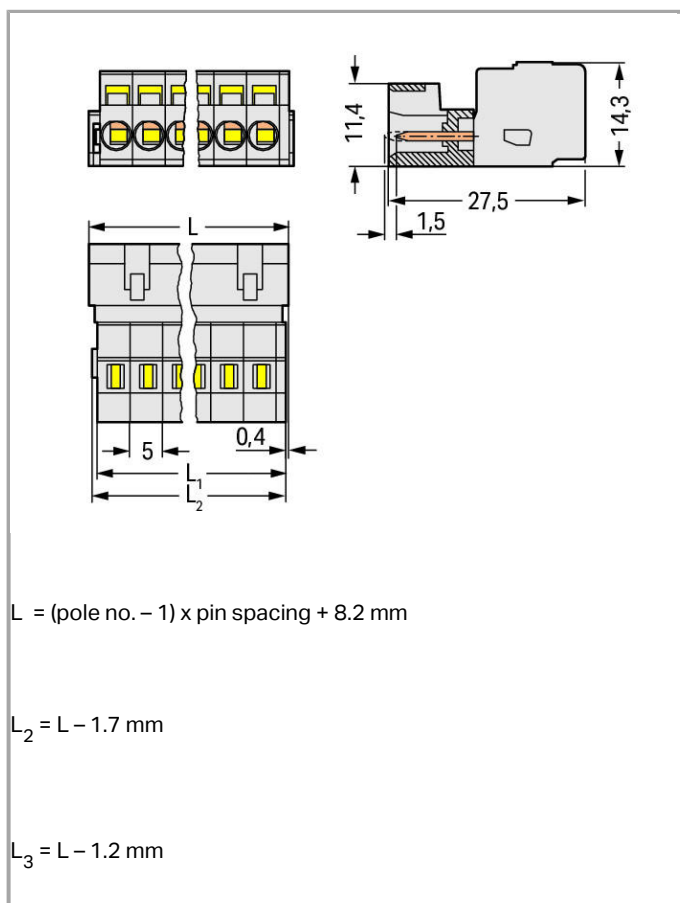
Current in A



Ambient operating temperature in °C

2-, 4-, 6-, 12-, 20- pole

Conductor rated current



Item description

- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For wire-to-wire and board-to-wire connections
- Versions available with snap-in mounting feet or flanges for panel or through-panel mounting
- 3- to 5-pole male connectors are also available with preceding ground contact
- 100 % protected against mismatching
- With coding fingers

Safety information 1:

The *MULTI CONNECTION SYSTEM (MCS)* is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS Connectors shall 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.

Data

Electrical data

Ratings per IEC/EN 60664-1

Rated voltage (III / 3)	320 V
Rated impulse voltage (III / 3)	4 kV
Rated voltage (III / 2)	320 V
Rated impulse voltage (III / 2)	4 kV
Rated voltage (II / 2)	630 V
Rated impulse voltage (II / 2)	4 kV
Rated current	12 A

Approvals per UL 1059

Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	15 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	10 A

Approvals per UL 1977

Rated voltage per UL 1977 (factory wiring only)	600 V
Rated current per UL 1977 (factory wiring only)	15 A

Approvals per CSA

Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	15 A
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	10 A

Connection data

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
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 ferrule with plastic collar	0.25 ... 1.5 mm²
Fine-stranded conductor with ferrule without plastic collar	0.25 ... 2.5 mm²
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch
No. of poles	12
Total number of connection points	12
Total number of potentials	12
Number of connection types	1
Number of levels	1



Conductor entry direction to mating direction	0°
---	----

Geometrical Data

Pin spacing	5 mm / 0.197 inch
Width	63.2 mm / 2.488 inch
Height	14.3 mm / 0.563 inch
Depth	27.5 mm / 1.083 inch

Plug connection

Contact type (pluggable connector)	Male connector/plug
Connector connection type	for conductors
Mismating protection	Yes

Material Data

Color	light gray
Material group	I
Insulating material	Polyamide 66 (PA 66)
Flammability class per UL94	V0
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E _{Cu})
Contact plating	tin-plated
Fire load	0.319 MJ
Weight	18.09 g

Environmental Requirements

Limit temperature range	-60 ... +100 °C
-------------------------	-----------------

Commercial data

Product Group	3 (Multi Conn. System)
Country of origin	DE
GTIN	4044918264303
Customs Tariff No.	85366990990

Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CB DEKRA Certification B.V.	IEC 61984	NL-39756
	CSA	C22.2	1466354



DEKRA Certification B.V.



CSA
DEKRA Certification B.V.

C22.2

1466354



KEMA/KEUR
DEKRA Certification B.V.

EN 61984

2190761.01

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	14- HG1241537- PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE000016Z

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Germany GmbH	UL 1059	E45172
	UR UL International Germany GmbH	UL 1977	E45171
	UR UL International Germany GmbH	UL 1977	E45171

Compatible products

Coding



Item no.: 231-129
Coding key; snap-on type

231-129

Insulation stop



Item no.: 231-670
Insulation stop; 0.08-0.2 mm² / 0.2 mm² "s"

231-670



Item no.: 231-671
Insulation stop; 0.25 - 0.5 mm²

231-671



Item no.: 231-672
Insulation stop; 0.75 - 1 mm²

231-672

Marking accessories

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

/500-103

210-331

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

/500-104

210-331

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

/500-202

210-332

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

/500-204

210-332

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

/500-205

210-332

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

/500-206

210-332



Item no.: 210-833
Marking strips; on reel; 6 mm wide; plain; Self-adhesive

210-833



Item no.: 210-834
Marking strips; on reel; 5 mm wide; plain; Self-adhesive

210-834

Strain relief plate



Item no.: 232-612
Strain relief housing

232-612

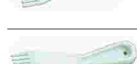
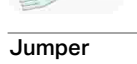
General accessories



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

231-668

tools

	Item no.: 209-130 Operating tool; suitable for 264, 280 and 281 Series; 1-way; of insulating material	209-130
	Item no.: 210-657 Operating tool with partially insulated shaft; Blade (3.5 x 0.5) mm; short	210-657
	Item no.: 210-720 Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm	210-720
	Item no.: 231-131 Push-button; for female and male connectors; loose	231-131
	Item no.: 231-159 Operating tool; for male and female connectors with CAGE CLAMP®; of Series 231, 232, 721, 722, 723, 731, 732	231-159
	Item no.: 231-231 Combination operating tool; for male and female connectors with CAGE CLAMP®	231-231
	Item no.: 231-291 Operating tool; for male and female connectors with CAGE CLAMP®; loose	231-291
	Item no.: 280-432 Operating tool; of insulating material; 2-way	280-432
	Item no.: 280-433 Operating tool; of insulating material; 3-way	280-433
	Item no.: 280-434 Operating tool; of insulating material; 4-way	280-434
	Item no.: 280-435 Operating tool; of insulating material; 5-way	280-435
	Item no.: 280-436 Operating tool; of insulating material; 6-way	280-436
	Item no.: 280-437 Operating tool; of insulating material; 7-way	280-437
	Item no.: 280-438 Operating tool; of insulating material; 8-way	280-438
	Item no.: 280-440 Operating tool; of insulating material; 10-way	280-440
Jumper		
	Item no.: 231-902 Comb-style jumper bar; for 5 mm and 5.08 mm pin spacing; reduces conductor size to 1.5 mm	231-902
	Item no.: 231-903 Comb-style jumper bar; 3-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated	231-903
	Item no.: 231-905 Comb-style jumper bar; 5-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated	231-905
	Item no.: 231-907 Comb-style jumper bar; 7-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated	231-907

**Item no.: 231-910**

Comb-style jumper bar; 10-way; suitable for 231 Series female connectors; with 5 mm pin spacing; insulated

231-910

ferrule**Item no.: 216-101**

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

216-101

**Item no.: 216-102**

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

216-102

**Item no.: 216-103**

Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated

216-103

**Item no.: 216-104**

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

216-104

**Item no.: 216-106**

Ferrule; Sleeve for 2.5 mm² / AWG 14; uninsulated; electro-tin plated

216-106

**Item no.: 216-121**

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

216-121

**Item no.: 216-122**

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

216-122

**Item no.: 216-123**

Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated

216-123

**Item no.: 216-124**

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

216-124

**Item no.: 216-131**

Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated

216-131

**Item no.: 216-132**

Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated

216-132

**Item no.: 216-141**

Ferrule; Sleeve for 0.5 mm² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92

216-141

**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

216-142

**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

216-143

**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

216-144

**Item no.: 216-151**

Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated

216-151

**Item no.: 216-152**

Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated

216-152

**Item no.: 216-201**

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

216-201

	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated	216-202
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated	216-203
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated	216-204
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated	216-221
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated	216-222
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated	216-223
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated	216-224
	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	216-241
	Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	216-242
	Item no.: 216-243 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	216-243
	Item no.: 216-244 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	216-244
	Item no.: 216-262 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	216-262
	Item no.: 216-263 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	216-263
	Item no.: 216-264 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	216-264
	Item no.: 216-284 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	216-284
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	216-301
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated	216-302
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	216-321



Item no.: 216-322
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated

216-322

Downloads
CAD/CAE - Smart Data
CAD data

3D Download 721-612	URL	Download
---------------------	-----	----------

Subject to changes.