

Data sheet | Item number: 733-109

1-conductor female plug; 100% protected against mismatching; 0.5 mm²; Pin spacing 2.5 mm; 9-pole



733-109



RoHS Compliant

[BOMcheck.net](https://www.bomcheck.net)

Color:

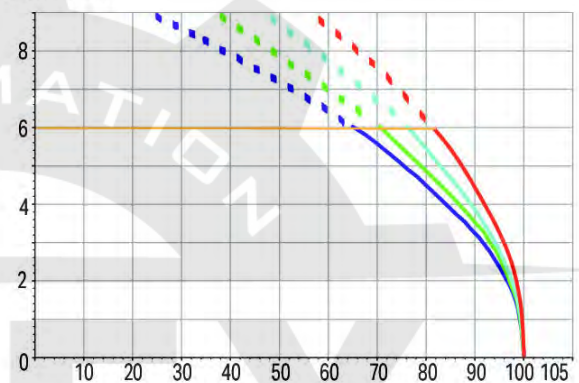
Derating Curve

1-conductor female connector (733-102) with
THT male header (733-332)

Pin spacing: 2.5 mm / Conductor cross-section: 0.5 mm² "f-st"

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

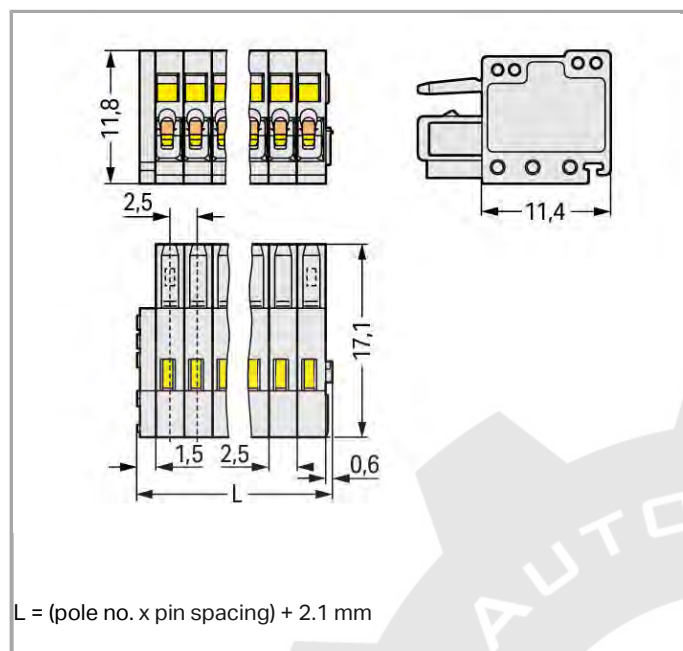
Current in A



Ambient operating temperature in °C

2-, 4-, 6-, 12-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
- Strain relief plates for factory and in-the-field assembly
- 100% protected against mismatching
- Coding via 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)	100 V
Rated impulse voltage (III / 3)	2.5 kV
Rated voltage (III / 2)	160 V
Rated impulse voltage (III / 2)	2.5 kV
Rated voltage (II / 2)	320 V
Rated impulse voltage (II / 2)	2.5 kV
Rated current	6 A

Approvals per UL 1059

Rated voltage UL (Use Group B)	150 V
Rated current UL (Use Group B)	4 A

Approvals per CSA

Rated voltage CSA (Use Group B)	150 V
Rated current CSA (Use Group B)	4 A

Connection data

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Solid conductor	0.08 ... 0.5 mm ² / 28 ... 20 AWG
Fine-stranded conductor	0.08 ... 0.5 mm ² / 28 ... 20 AWG
Fine-stranded conductor with ferrule with plastic collar	0.25 ... 0.34 mm ²
Fine-stranded conductor with ferrule without plastic collar	0.25 ... 0.34 mm ²
Strip length	5 ... 6 mm / 0.2 ... 0.24 inch
No. of poles	9
Total number of connection points	9
Total number of potentials	9
Number of connection types	1
Number of levels	1
Conductor entry direction to mating direction	0°

Geometrical Data

Pin spacing	2.5 mm / 0.098 inch
Width	24.6 mm / 0.969 inch
Height	11.8 mm / 0.465 inch
Depth	17.1 mm / 0.673 inch

Plug connection

Contact type (pluggable connector)	Female connector/socket
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	Copper alloy
Contact plating	tin-plated
Fire load	0.069 MJ
Weight	3.909 g

Environmental Requirements

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

Product Group	3 (Multi Conn. System)
Country of origin	DE
GTIN	4045454819194
Customs Tariff No.	85366990990

Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 61984	2169534.01
	CCA DEKRA Certification B.V.	IEC 61984	NL-31141
	CSA DEKRA Certification B.V.	C22.2	1465035
	CSA DEKRA Certification B.V.	C22.2	1465035

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 1977	E45171
	UL Underwriters Laboratories Inc.	UL 1059	20190122-E45172

Compatible products

check



Item no.: 735-500

Test pin; 1 mm Ø; with solder connection for test wire

735-500

tools



Item no.: 210-251

Operating tool; for female and male connectors with CAGE CLAMP® connection; MCS MINI & MICRO

210-251



Item no.: 210-719

Operating tool with partially insulated shaft; Type 1, blade (2.5 x 0.4) mm

210-719



Item no.: 233-331

Operating tool; for female and male connectors with CAGE CLAMP® connection; insulated

233-331



Item no.: 233-332

Operating tool; for 233 and 733 Series; of insulating material

233-332



Item no.: 233-335

Operating tool; for 233 and 733 Series

233-335



Item no.: 733-130

Operating tool; for male and female connectors with CAGE CLAMP®; loose

733-130



Item no.: 733-191

Operating tool; for male and female connectors with CAGE CLAMP®; loose

733-191

Marking accessories

Item no.: 210-331/250-202

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip

length 182 mm; Horizontal marking; Self-adhesive

210-331

/ 250-202

Item no.: 210-331/250-204

Marking strips; as a DIN A4 sheet; MARKED; 17-32 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive

/ 250-204

210-331

Item no.: 210-331/250-206

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (400x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive

/ 250-206

210-331

Item no.: 210-331/250-207

Marking strips; as a DIN A4 sheet; MARKED; 1-48 (100x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive

/ 250-207

210-331

ferrule**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.: 216-151**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.: 216-301Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated

216-301

**Item no.: 216-302**Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated

216-302

Item no.: 216-321Ferrule; Sleeve for 0.25 mm² / 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

Strain relief plate**Item no.: 734-128**

Strain relief plate; 12.5 mm wide

734-128

Downloads**CAD/CAE - Smart Data****CAD data**

3D Download 733-109

[Download](#)



Subject to changes.
