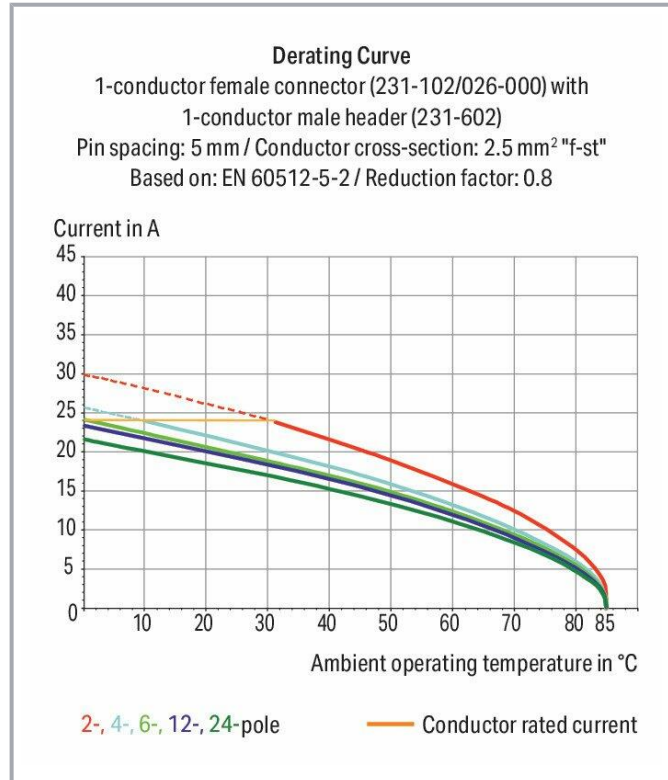


Data sheet | Item number: 231-654/019-000

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm;
24-pole; clamping collar; 2,50 mm²; orange



www.wago.com/231-654/019-000



Subject to changes. Please also observe the further product documentation!

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Dimensions in mm

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

$L_3 = L - 0.2 \text{ mm}$

$L_4 = L_3 + 5.8 \text{ mm}$

$L_5 = L_3 + 11.8 \text{ mm}$

Item description

- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation

—
Subject to changes. Please also observe the further product documentation!

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- For wire-to-wire and board-to-wire connections
- Versions available with snap-in mounting feet or flanges for panel or through-panel mounting
- With coding fingers

Data

Notes

Safety information 1

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. The circuit design should ensure header pins, which can be touched, are not live when unmated.

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

Other pole numbers
Gold-plated or partially gold-plated contact surfaces

Electrical data

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
Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	320 V
Rated surge voltage (III/3)	4 kV
Rated voltage (III/2)	320 V
Rated surge voltage (III/2)	4 kV
Nominal voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
Rated current	12 A
Legend (ratings)	(III / 2) ≙ Overvoltage category III / Pollution degree 2
Rated voltage UL 1977	600 V
Rated current UL 1977	15 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

Subject to changes. Please also observe the further product documentation!

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Connection data

Total number of connection points	24
Total number of potentials	24
Number of connection types	1
Number of levels	1
Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm ²
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm ²
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch
Pole No.	24
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	5.08 mm / 0.2 inch
Width	136.72 mm / 5.383 inch
Height	14.3 mm / 0.563 inch
Depth	27.5 mm / 1.083 inch

Mechanical data

Mounting type	Mounting flange
Mounting type	Feed-through mounting Panel mounting

Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for conductor
Mismating protection	No
Locking of plug-in connection	Without

Material data

Color	orange
Material group	I
Insulation material	Polyamide (PA66)

Subject to changes. Please also observe the further product documentation!

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	0.621 MJ
Weight	37.8 g

Environmental requirements



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


Product Group	3 (Multi Conn. System)
PU (SPU)	10 Stück
Packaging type	box
Country of origin	DE
GTIN	4044918261357
Customs tariff number	85366990990

Approvals / Certificates


Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CB DEKRA Certification B.V.	IEC 61984	NL-39756
	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	-	19- HG1869876- PDA




Subject to changes. Please also observe the further product documentation!

	BV Bureau Veritas S.A.	IEC 60998	11915/DO BV
	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
	UR Underwriters Laboratories Inc.	UL 1059	E45172

Counterpart

	Item no.231-324/026-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm ² ; Pin spacing 5.08 mm; 24-pole; 2,50 mm ² ; orange	www.wago.com/231-324/026-000
	Item no.232-284 THT female header; angled; Pin spacing 5.08 mm; 24-pole; 0.6 x 1.0 mm solder pin; orange	www.wago.com/232-284
	Item no.232-184 THT female header; straight; Pin spacing 5.08 mm; 24-pole; 0.6 x 1.0 mm solder pin; orange	www.wago.com/232-184

Optional accessories

Ferrule		
	Item no.: 216-101 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-101
	Item no.: 216-104 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-104
	Item no.: 216-106 Ferrule; Sleeve for 2.5 mm ² / AWG 14; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-106
	Item no.: 216-102	

Subject to changes. Please also observe the further product documentation!



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

www.wago.com/216-102

Item no.: 216-103

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

www.wago.com/216-103

Item no.: 216-123

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

www.wago.com/216-123

Item no.: 216-122

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

www.wago.com/216-122

Item no.: 216-124

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

www.wago.com/216-124

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

www.wago.com/216-142

Item no.: 216-132

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

www.wago.com/216-132

Item no.: 216-121

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

www.wago.com/216-121

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

www.wago.com/216-143

Item no.: 216-131

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

www.wago.com/216-131

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

www.wago.com/216-141

Item no.: 216-152

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

www.wago.com/216-152

Item no.: 216-203

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

www.wago.com/216-203

Item no.: 216-202

Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray

www.wago.com/216-202

Item no.: 216-151

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

www.wago.com/216-151

Item no.: 216-204

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

www.wago.com/216-204

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

www.wago.com/216-144

Item no.: 216-201

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

www.wago.com/216-201

Subject to changes. Please also observe the further product documentation!

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	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-223
	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; white	www.wago.com/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; gray	www.wago.com/216-242
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-222
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-221
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-224
	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; red	www.wago.com/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; black	www.wago.com/216-244
	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; red	www.wago.com/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; black	www.wago.com/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; black	www.wago.com/216-284
	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; gray	www.wago.com/216-262
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-301
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated; yellow	www.wago.com/216-321
	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green	www.wago.com/216-322
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; green	www.wago.com/216-302

Marking accessories

Marking strip

Subject to changes. Please also observe the further product documentation!

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Item no.: 210-331/508-103 www.wago.com/210-331/508-103
 Marking strips; as a DIN A4 sheet; MARKED; 1-12 (200x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

Item no.: 210-331/508-104 www.wago.com/210-331/508-104
 Marking strips; as a DIN A4 sheet; MARKED; 13-24 (200x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

Item no.: 210-332/508-202 www.wago.com/210-332/508-202
 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.: 210-332/508-204 www.wago.com/210-332/508-204
 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.: 210-332/508-206 www.wago.com/210-332/508-206
 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

Item no.: 210-332/508-205 www.wago.com/210-332/508-205
 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

Mounting

Mounting accessories

 **Item no.: 209-147** www.wago.com/209-147
 Self-tapping screw

 **Item no.: 231-194** www.wago.com/231-194
 Self-tapping screw; B 2.2x13, fixing hole 1.8 mm Ø

 **Item no.: 231-195** www.wago.com/231-195
 Screw with nut; M2x12; for fixing element

 **Item no.: 231-295** www.wago.com/231-295
 Screw with nut

Jumpers

Jumper

 **Item no.: 231-905** www.wago.com/231-905
 Jumper; for conductor entry; 5-way; insulated; gray

 **Item no.: 231-903** www.wago.com/231-903
 Jumper; for conductor entry; 3-way; insulated; gray

 **Item no.: 231-907** www.wago.com/231-907
 Jumper; for conductor entry; 7-way; insulated; gray

 **Item no.: 231-910** www.wago.com/231-910
 Jumper; for conductor entry; 10-way; insulated; gray

Subject to changes. Please also observe the further product documentation!



Item no.: 231-902
 Jumper; for conductor entry; 2-way; insulated; gray

www.wago.com/231-902

Tool

Operating tool



Item no.: 209-130
 Operating tool; suitable for 264, 280 and 281 Series; 1-way; of insulating material; white

www.wago.com/209-130



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

www.wago.com/209-132



Item no.: 210-657
 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

www.wago.com/210-657



Item no.: 210-720
 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

www.wago.com/210-720



Item no.: 231-131
 Operating tool; made of insulating material; 1-way; loose; white

www.wago.com/231-131



Item no.: 231-291
 Operating tool; made of insulating material; 1-way; loose; red

www.wago.com/231-291



Item no.: 280-432
 Operating tool; made of insulating material; 2-way; white

www.wago.com/280-432



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

www.wago.com/280-434



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

www.wago.com/280-437



Item no.: 280-440
 Operating tool; made of insulating material; 10-way

www.wago.com/280-440



Item no.: 280-435
 Operating tool; made of insulating material; 5-way; gray

www.wago.com/280-435



Item no.: 280-436
 Operating tool; made of insulating material; 6-way

www.wago.com/280-436



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

www.wago.com/280-438



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

www.wago.com/280-433

Insulation stop

Insulation stop

Subject to changes. Please also observe the further product documentation!



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

www.wago.com/231-672



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

www.wago.com/231-670



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

www.wago.com/231-671

Cover

Cover



Item no.: 231-669
Lockout caps; for covering unused clamping units; orange

www.wago.com/231-669

Coding

Coding



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

www.wago.com/231-129

Downloads

Documentation

Additional Information

Technical explanations	Apr 3, 2019	pdf 2.0 MB	Download
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CAD/CAE-Data

CAE data

EPLAN Data Portal 231-654/019-000	URL	Download
ZUKEN Portal 231-654/019-000	URL	Download
EPLAN Data Portal 231-654/019-000	URL	Download

CAD data

2D/3D Models 231-654/019-000	URL	Download
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Subject to changes. Please also observe the further product documentation!

Environmental Product Compliance

Compliance Search

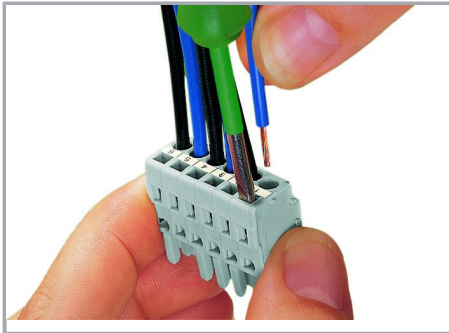
Environmental Product Compliance 231-654/019-000

URL

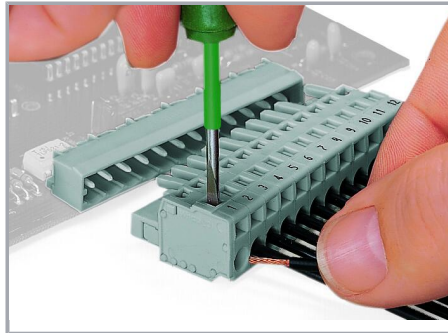
Download

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5.08 mm; 24-pole; clamping collar; 2,50 mm²; orange

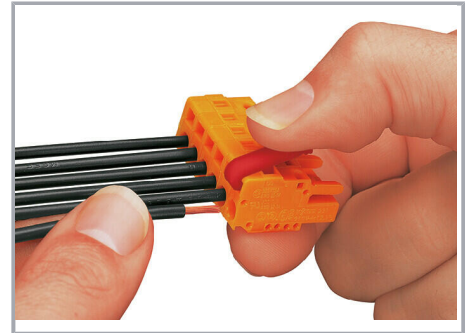
Installation Notes



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.



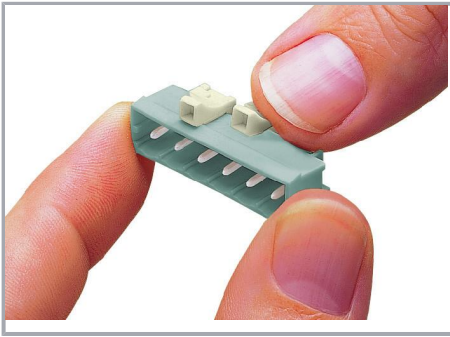
Inserting a conductor into CAGE CLAMP® unit via operating lever (231-291).



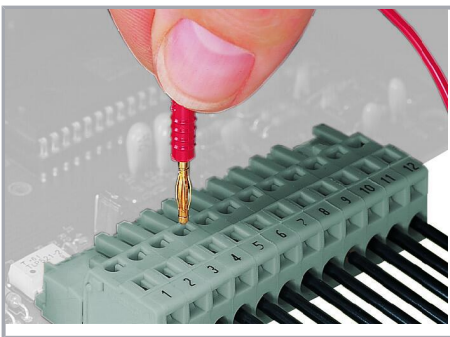
Inserting a conductor via operating tool.

Coding

Subject to changes. Please also observe the further product documentation!



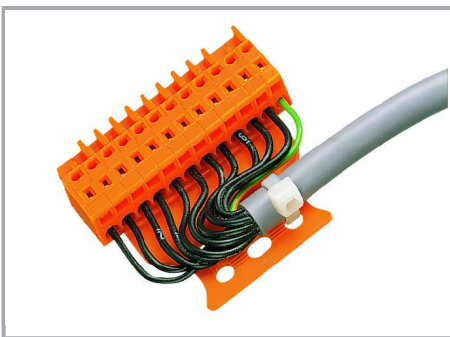
Coding a male header – fitting coding key(s).



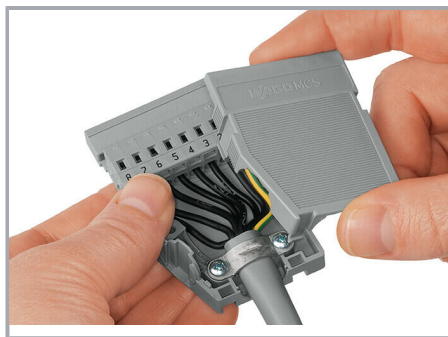
Testing – female connector with CAGE CLAMP®

Integrated test ports for testing perpendicular to conductor entry via 2 or 2.3 mm Ø test plug

Installation



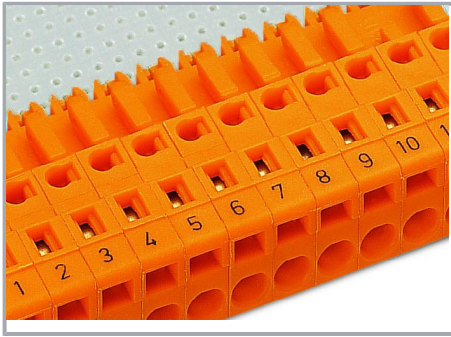
Male connector with strain relief plate



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

Marking

Subject to changes. Please also observe the further product documentation!



Labeling via direct marking or self-adhesive strips.

Product family

MCS MIDI Classic

[Show all products from the family](#)

Subject to changes. Please also observe the further product documentation!