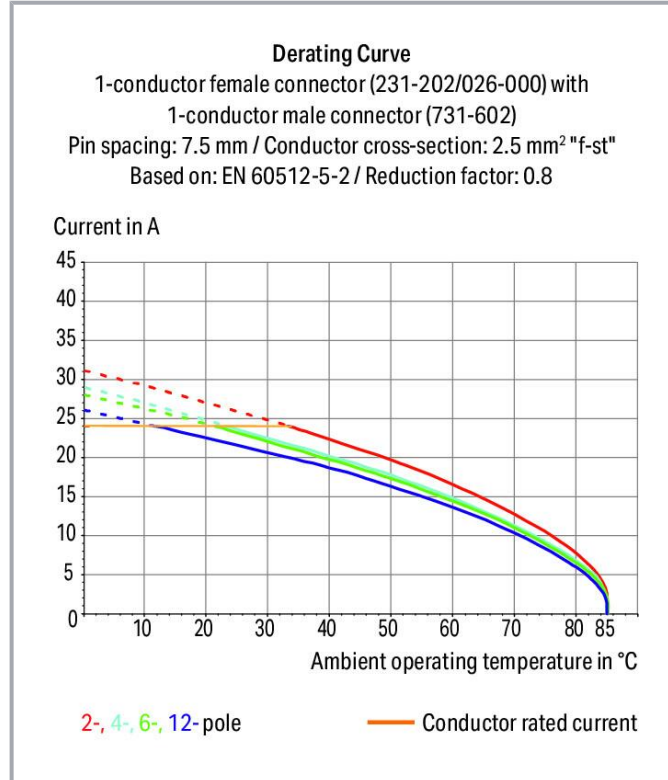


Data sheet | Item number: 731-610

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm;
10-pole; 2,50 mm²; gray



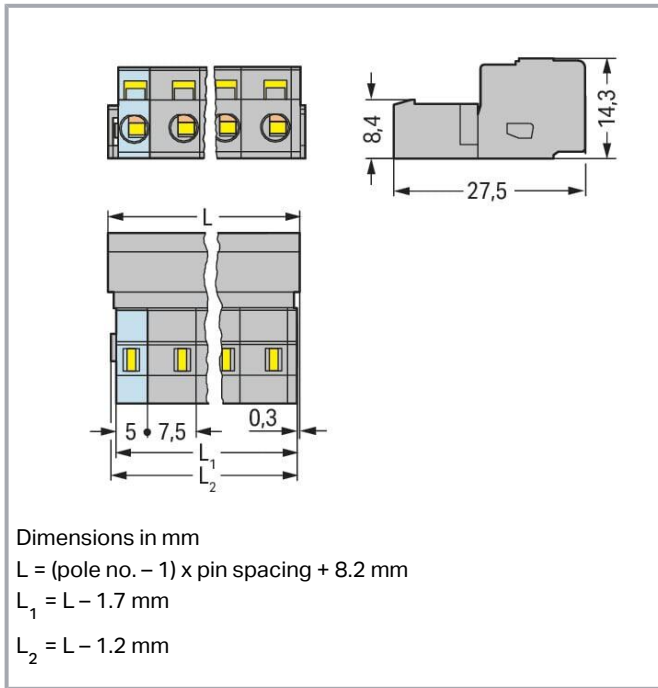
www.wago.com/731-610



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

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Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.



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
- With coding fingers

Data

Notes

Safety information

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. 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/>.

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



Electrical data

Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	500 V
Rated impulse voltage (III/3)	6 kV
Rated voltage (III/2)	630 V
Rated impulse voltage (III/2)	6 kV
Nominal voltage (II/2)	1000 V
Rated surge voltage (II/2)	6 kV
Rated current	12 A
Legend (ratings)	(III / 2) ≙ Overvoltage category III / Pollution degree 2

Ratings per UL

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

Ratings per UL 1977

Rated voltage (UL 1977)	600 V
Rated current UL 1977	15 A

Ratings per CSA

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 points	10
Total number of potentials	10
Number of connection types	1
Number of levels	1

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



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 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 inches
Pole number	10
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	7.5 mm / 0.295 inches
Width	75.7 mm / 2.98 inches
Height	14.3 mm / 0.563 inches
Depth	27.5 mm / 1.083 inches

Mechanical Data

Variable coding	Yes
Anti-rotation protection	Yes

Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for conductor
Mismating protection	No
Plugging without loss of pin spacing	No
Locking of plug-in connection	none

Material data

Note (material data)	Information on material specifications can be found here
Color	gray

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



Material group	I
Insulation material	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	0.552 MJ
Weight	18.4 g

Environmental requirements

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

Commercial data

Product Group	3 (Multi Conn. System)
eCl@ss 10.0	27-44-03-09
eCl@ss 9.0	27-44-03-09
ETIM 8.0	EC002638
ETIM 7.0	EC002638
ECCN	NO DATA
PU (SPU)	25 pcs
Packaging type	box
Country of origin	DE
GTIN	4044918267144
Customs tariff number	85366930000

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CB DEKRA Certification B.V.	IEC 61984	NL-39756 /A1
	KEMA/KEUR DEKRA Certification B.V.	EN 61984	71- 121453

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






	UR Underwriters Laboratories Inc.	UL 1059	E45172
	UR Underwriters Laboratories Inc.	UL 1977	E 45171


Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	Railway WAGO GmbH & Co. KG	-	Railway Ready





Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19- HG1869876- PDA
	DNV DNV GL SE	-	TAE000016Z
	LR Lloyds Register	IEC 61984	96/20035 (E5)

Counterpart

	Item no.2231-210/008-000 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm ² ; Pin spacing 7.5 mm; 10-pole; Snap-in mounting feet; 2,50 mm ² ; gray	www.wago.com/2231-210/008-000
	Item no.2231-210/026-000	

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

	1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 10-pole; 2,50 mm²; gray	www.wago.com/2231-210/026-000
	Item no.2231-210/031-000 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 10-pole; clamping collar; 2,50 mm²; gray	www.wago.com/2231-210/031-000
	Item no.2231-210/037-000 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 10-pole; Lateral locking levers; 2,50 mm²; gray	www.wago.com/2231-210/037-000
	Item no.231-210/008-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 10-pole; Snap-in mounting feet; 2,50 mm²; gray	www.wago.com/231-210/008-000
	Item no.231-210/026-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 10-pole; 2,50 mm²; gray	www.wago.com/231-210/026-000
	Item no.231-210/027-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 10-pole; clamping collar; 2,50 mm²; gray	www.wago.com/231-210/027-000
	Item no.231-210/031-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 10-pole; clamping collar; 2,50 mm²; gray	www.wago.com/231-210/031-000
	Item no.231-210/037-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 10-pole; Lateral locking levers; 2,50 mm²; gray	www.wago.com/231-210/037-000
	Item no.231-2210/026-000 2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 10-pole; with integrated end plate; 2,50 mm²; gray	www.wago.com/231-2210/026-000
	Item no.232-740 THT female header; straight; Pin spacing 7.5 mm; 10-pole; 0.6 x 1.0 mm solder pin; gray	www.wago.com/232-740
	Item no.231-2210/037-000 2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 10-pole; Lateral locking levers; 2,50 mm²; gray	www.wago.com/231-2210/037-000
	Item no.232-740/031-000 THT female header; straight; Pin spacing 7.5 mm; 10-pole; clamping collar; 0.6 x 1.0 mm solder pin; gray	www.wago.com/232-740/031-000

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



Item no.232-740/039-000

THT female header; straight; Pin spacing 7.5 mm; 10-pole; Locking lever; 0.6 x 1.0 mm solder pin; gray

www.wago.com/232-740/039-000



Item no.232-740/047-000

THT female header; straight; Pin spacing 7.5 mm; 10-pole; Spacer flange; 0.6 x 1.0 mm solder pin; gray

www.wago.com/232-740/047-000



Item no.232-740/045-000

THT female header; straight; Pin spacing 7.5 mm; 10-pole; 0.6 x 1.0 mm solder pin; gray

www.wago.com/232-740/045-000



Item no.232-840

THT female header; angled; Pin spacing 7.5 mm; 10-pole; 0.6 x 1.0 mm solder pin; gray

www.wago.com/232-840



Item no.232-840/031-000

THT female header; angled; Pin spacing 7.5 mm; 10-pole; clamping collar; 0.6 x 1.0 mm solder pin; gray

www.wago.com/232-840/031-000



Item no.232-840/045-000

THT female header; angled; Pin spacing 7.5 mm; 10-pole; 0.6 x 1.0 mm solder pin; gray

www.wago.com/232-840/045-000









Item no.232-840/047-000

THT female header; angled; Pin spacing 7.5 mm; 10-pole; Spacer flange; 0.6 x 1.0 mm solder pin; gray

www.wago.com/232-840/047-000

Optional accessories

Ferrule

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 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-102
	Item no.: 216-103 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated	www.wago.com/216-103
	Item no.: 216-123 Ferrule; Sleeve for 1 mm ² / AWG 18; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-123

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



	Item no.: 216-122 Ferrule; Sleeve for 0.75 mm ² / AWG 20; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-122
	Item no.: 216-124 Ferrule; Sleeve for 1.5 mm ² / AWG 16; uninsulated; electro-tin plated	www.wago.com/216-124
	Item no.: 216-142 Ferrule; Sleeve for 0.75 mm ² / 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 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-132
	Item no.: 216-121 Ferrule; Sleeve for 0.5 mm ² / AWG 22; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-121
	Item no.: 216-143 Ferrule; Sleeve for 1 mm ² / 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 mm ² / AWG 24; uninsulated; electro-tin plated; silver-colored	www.wago.com/216-131
	Item no.: 216-141 Ferrule; Sleeve for 0.5 mm ² / 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 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-152
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
	Item no.: 216-151 Ferrule; Sleeve for 0.25 mm ² / AWG 24; uninsulated; electro-tin plated	www.wago.com/216-151
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
	Item no.: 216-144 Ferrule; Sleeve for 1.5 mm ² / 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 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-201
	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	www.wago.com/216-242




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

crimped; acc. to DIN 46228, Part 4/09.90; gray

	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.: 216-262 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; light turquoise	www.wago.com/216-322
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / 22 AWG; insulated; electro-tin plated; light turquoise	www.wago.com/216-302

Tool

Operating tool

	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

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



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

www.wago.com/231-291

Cover

Cover



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

www.wago.com/231-668

Insulation stop

Insulation stop



Item no.: 231-673
Insulation stop; 0.08-0.2 mm² / 0.2 mm² "s"; white

www.wago.com/231-673



Item no.: 231-674
Insulation stop; 0.25 - 0.5 mm²; light gray

www.wago.com/231-674



Item no.: 231-675
Insulation stop; 0.75 - 1 mm²; dark gray

www.wago.com/231-675

Marking accessories

Marking strip



Item no.: 210-331/750-202
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (100x); Height of marker strip: 2.3 mm/0.091 in; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-331/750-202



Item no.: 210-332/750-020
Marking strips; as a DIN A4 sheet; MARKED; 1-20 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

www.wago.com/210-332/750-020

Coding

Coding



Item no.: 231-130
Coding key; snap-on type; light gray

www.wago.com/231-130

Downloads

Documentation

Additional Information

Technical Section	2019 Apr 3	pdf	Download
Technical explanations		2.1 MB	

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

CAD/CAE-Data

CAD data

2D/3D Models 731-610	URL	Download
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CAE data

EPLAN Data Portal 731-610	URL	Download
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ZUKEN Portal 731-610	URL	Download
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Asset Administration Shell

Asset Administration Shell 731-610	URL	Download
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Environmental Product Compliance

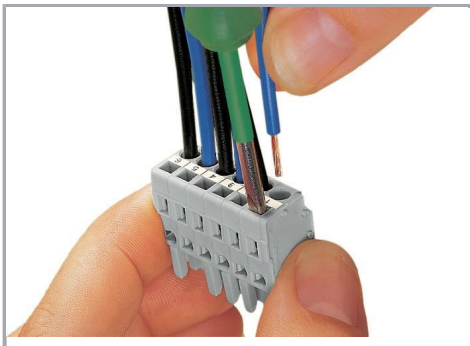
Compliance Search

Environmental Product Compliance 731-610	URL	Download
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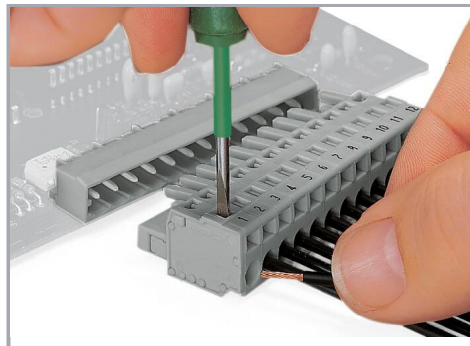
1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 7.5 mm; 10-pole;
2,50 mm²; gray

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.

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



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



Inserting a conductor via operating tool.

Coding



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

Testing



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

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



Male connector with strain relief plate



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

Marking



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!