

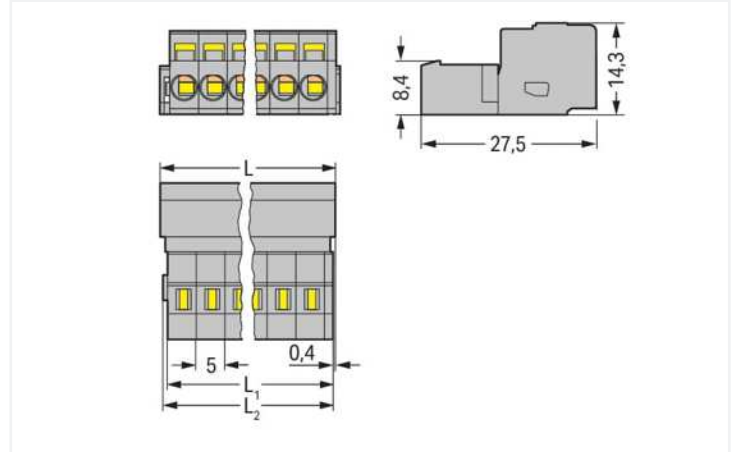
Data Sheet | Item Number: 231-623

1-conductor male connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 23-pole;
2,50 mm²; gray

<https://www.wago.com/231-623>



Color: ■ gray

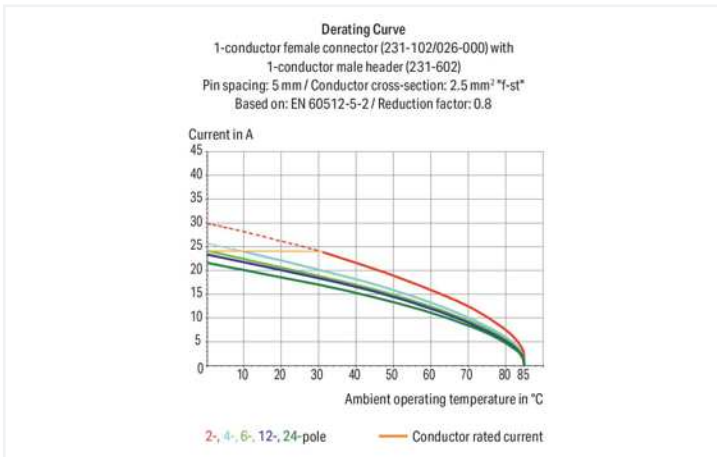


Dimensions in mm

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

$L1 = L - 1.7 \text{ mm}$

$L2 = L - 1.2 \text{ mm}$



- 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

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/>.

Electrical data

Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal 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
Nominal voltage (II/2)	630 V
Rated surge voltage (II/2)	4 kV
Rated current	12 A
Legend (ratings)	(III / 2) Δ Overvoltage category III / Pollution degree 2

Ratings per UL 1059

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	23
Total number of potentials	23
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 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	23
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	5 mm / 0.197 inches
Width	118.2 mm / 4.654 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
Mismatching protection	No

Material data

Note (material data)	Information on material specifications can be found here
Color	gray
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	0.836 MJ
Weight	34 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
PU (SPU)	10 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918259309
Customs tariff number	85366990990

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-39756/A1
CSA DEKRA Certification B.V.	C22.2	1466354
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-121453
UR Underwriters Laboratories Inc.	UL 1977	E45171

Declarations of conformity and manufacturer's declarations



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	-	19-HG1869876-PDA
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAE000016Z
LR Lloyds Register	IEC 61984	96/20035 (E5)

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 231-623

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 1949.09 KB	

CAD/CAE-Data

CAD data
2D/3D Models 231-623

CAE data
EPLAN Data Portal 231-623
ZUKEN Portal 231-623

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket

 Item No.: 232-123/026-000 1-conductor female connector, angled; CAGE CLAMP®; 2,5 mm²; Pin spacing 5 mm; 23-pole; 2,50 mm²; gray	 Item No.: 232-223/026-000 1-conductor female connector, angled; CAGE CLAMP®; 2,5 mm²; Pin spacing 5 mm; 23-pole; 2,50 mm²; gray	 Item No.: 231-123/026-000 1-conductor female connector; CAGE CLAMP®; 2,5 mm²; Pin spacing 5 mm; 23-pole; 2,50 mm²; gray	 Item No.: 231-123/027-000 1-conductor female connector; CAGE CLAMP®; 2,5 mm²; Pin spacing 5 mm; 23-pole; clamping collar; 2,50 mm²; gray
 Item No.: 231-123/031-000 1-conductor female connector; CAGE CLAMP®; 2,5 mm²; Pin spacing 5 mm; 23-pole; clamping collar; 2,50 mm²; gray	 Item No.: 231-123/037-000 1-conductor female connector; CAGE CLAMP®; 2,5 mm²; Pin spacing 5 mm; 23-pole; Lateral locking levers; 2,50 mm²; gray	 Item No.: 231-123/008-000 1-conductor female connector; CAGE CLAMP®; 2,5 mm²; Pin spacing 5 mm; 23-pole; Snap-in mounting feet; 2,50 mm²; gray	 Item No.: 231-123/102-000 1-conductor female connector; CAGE CLAMP®; 2,5 mm²; Pin spacing 5 mm; 23-pole; with integrated end plate; 2,50 mm²; gray

1.1.1 Female connector/socket



Item No.: 2231-123/026-000

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 23-pole; 2,50 mm²; gray



Item No.: 2231-123/031-000

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 23-pole; clamping collar; 2,50 mm²; gray



Item No.: 2231-123/037-000

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 23-pole; Lateral locking levers; 2,50 mm²; gray



Item No.: 2231-123/008-000

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 23-pole; Snap-in mounting feet; 2,50 mm²; gray



Item No.: 2231-123/102-000

1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 23-pole; with integrated end plate; 2,50 mm²; gray



Item No.: 232-253

THT female header; angled; Pin spacing 5 mm; 23-pole; 0.6 x 1.0 mm solder pin; gray



Item No.: 232-253/031-000

THT female header; angled; Pin spacing 5 mm; 23-pole; clamping collar; 0.6 x 1.0 mm solder pin; gray



Item No.: 232-253/039-000

THT female header; angled; Pin spacing 5 mm; 23-pole; Locking lever; 0.6 x 1.0 mm solder pin; gray



Item No.: 232-253/047-000

THT female header; angled; Pin spacing 5 mm; 23-pole; Spacer flange; 0.6 x 1.0 mm solder pin; gray



Item No.: 232-153

THT female header; straight; Pin spacing 5 mm; 23-pole; 0.6 x 1.0 mm solder pin; gray



Item No.: 232-153/031-000

THT female header; straight; Pin spacing 5 mm; 23-pole; clamping collar; 0.6 x 1.0 mm solder pin; gray



Item No.: 232-153/039-000

THT female header; straight; Pin spacing 5 mm; 23-pole; Locking lever; 0.6 x 1.0 mm solder pin; gray



Item No.: 232-153/047-000

THT female header; straight; Pin spacing 5 mm; 23-pole; Spacer flange; 0.6 x 1.0 mm solder pin; 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.



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



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.