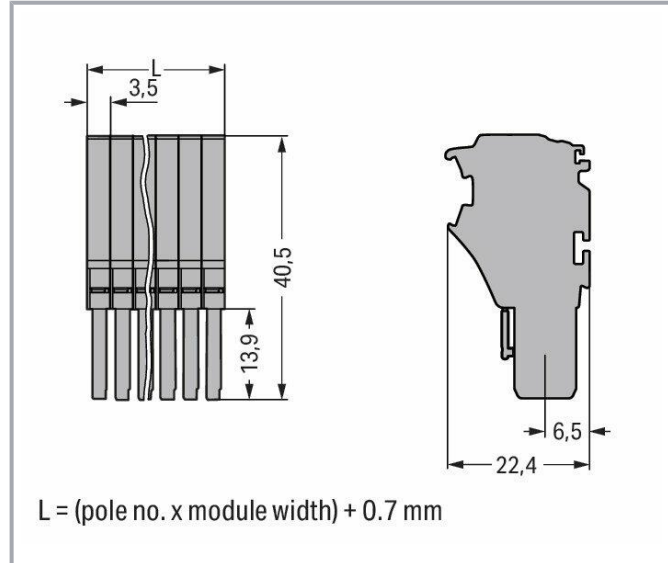


Data sheet | Item number: 2020-110

1-conductor female connector; Push-in CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm; 10-pole; 1,50 mm<sup>2</sup>; gray

[www.wago.com/2020-110](http://www.wago.com/2020-110)



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

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## Data Notes

Safety information	According to EN 61984, pluggable connectors without current interrupting capacity must not be mated or unmated when live or under load.
Safety information 2	Notice: An appropriate end plate must be applied to the carrier terminal blocks after each female plug.

## Electrical data

### Ratings per IEC/EN

Ratings per	IEC/EN 61984
Nominal voltage (III/3)	500 V
Rated impulse voltage (III/3)	6 kV
Rated current	13.5 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

### 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 C)	300 V
Rated current UL (Use Group C)	15 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	15 A

### Ratings per CSA

Approvals per	CSA 22.2 No 158
Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	10 A
Rated voltage CSA (Use Group C)	300 V
Rated current CSA (Use Group C)	10 A
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	10 A

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



## Connection data

Connection points	10
Total number of potentials	10

## Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool
Connectable conductor materials	Copper
Nominal cross-section	1 mm <sup>2</sup>
Solid conductor	0.14 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG
Solid conductor; push-in termination	0.5 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG
Fine-stranded conductor	0.14 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG
Fine-stranded conductor; with insulated ferrule	0.14 ... 0.75 mm <sup>2</sup> / 24 ... 18 AWG
Fine-stranded conductor; with ferrule; push-in termination	0.5 ... 0.75 mm <sup>2</sup> / 20 ... 18 AWG
Note (conductor cross-section)	Depending on the conductor characteristic, a conductor with a smaller cross-section can also be inserted via push-in termination.
Strip length	9 ... 11 mm / 0.35 ... 0.43 inches
Pole number	10
Wiring direction	Front-entry wiring

## Physical data

Width	35.7 mm / 1.406 inches
Height	40.5 mm / 1.594 inches
Depth	22.4 mm / 0.882 inches
Module width	3.5 mm / 0.138 inches

## Mechanical Data

Variable coding	Yes
Marking level	Side marking
Anti-rotation protection	Yes

## Plug-in connection

Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for conductor
Mismating protection	No

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



Plugging without loss of pin spacing	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
Fire load	0.403 MJ
Weight	22.7 g

## Environmental requirements

Processing temperature	-35 ... +85 °C
Continuous operating temperature	-60 ... +105 °C

## Commercial data

eCl@ss 10.0	27-14-11-06
eCl@ss 9.0	27-14-11-06
ETIM 8.0	EC001284
ETIM 7.0	EC001284
PU (SPU)	25 pcs
Packaging type	Box
Country of origin	CN
GTIN	4050821245094
Customs tariff number	85366990990

## Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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## Approvals / Certificates

### General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 60947	NTR NL 7617

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CCA



CSA  
DEKRA Certification B.V.

C22.2

2516073





UL  
UL International Germany GmbH



UL 1059

E 45172

## Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
	UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

## Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	EN 60947	20- HG1941090- PDA
	BV Bureau Veritas S.A.	EN 60947	38586/BO BV

## Optional accessories

## Strain relief

Strain relief plate

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

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**Item no.: 734-326**

Strain relief plate; for female and male connectors; 35 mm wide; 1 part; gray

[www.wago.com/734-326](http://www.wago.com/734-326)

**Tool**

Operating tool



**Item no.: 210-648**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; angled; short

[www.wago.com/210-648](http://www.wago.com/210-648)



**Item no.: 210-647**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft; multicoloured

[www.wago.com/210-647](http://www.wago.com/210-647)



**Item no.: 210-719**

Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

[www.wago.com/210-719](http://www.wago.com/210-719)

**Marking accessories**

Marking strip



**Item no.: 2009-110**

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

[www.wago.com/2009-110](http://www.wago.com/2009-110)



**Item no.: 210-831**

Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white

[www.wago.com/210-831](http://www.wago.com/210-831)



**Item no.: 210-833**

Marking strips; 25 m on roll; 6 mm wide; plain; Self-adhesive; white

[www.wago.com/210-833](http://www.wago.com/210-833)



**Item no.: 210-834**

Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white

[www.wago.com/210-834](http://www.wago.com/210-834)



**Item no.: 210-832**

Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white

[www.wago.com/210-832](http://www.wago.com/210-832)

Marker



**Item no.: 2009-113**

WMB-Inline; for Smart Printer; 2300 pieces on roll; plain; snap-on type; white

[www.wago.com/2009-113](http://www.wago.com/2009-113)



**Item no.: 793-3501**

WMB marking card; as card; plain; snap-on type; white

[www.wago.com/793-3501](http://www.wago.com/793-3501)

**Protective warning marker**

Cover



**Item no.: 2000-115**




Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

[www.wago.com/2000-115](http://www.wago.com/2000-115)

**Ferrule**



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

## Ferrule

	<b>Item no.: 216-241</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	<a href="http://www.wago.com/216-241">www.wago.com/216-241</a>
	<b>Item no.: 216-242</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	<a href="http://www.wago.com/216-242">www.wago.com/216-242</a>
	<b>Item no.: 216-243</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	<a href="http://www.wago.com/216-243">www.wago.com/216-243</a>

## Locking levers

## Locking system

	<b>Item no.: 2022-151</b> Locking lever; gray	<a href="http://www.wago.com/2022-151">www.wago.com/2022-151</a>
	<b>Item no.: 2022-152</b> Locking lever; orange	<a href="http://www.wago.com/2022-152">www.wago.com/2022-152</a>

## Downloads

## Documentation

## Bid Text

2020-110 X81 - Datei	2019 Feb 19	xml 4.0 kB	Download
2020-110 docx - Datei	2018 Aug 6	docx 15.4 kB	Download

## Additional Information

Technical Section Technical explanations		pdf 2.2 MB	Download
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## CAD/CAE-Data

## CAD data

2D/3D Models 2020-110		URL	Download
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## CAE data

EPLAN Data Portal 2020-110		URL	Download
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ZUKEN Portal 2020-110		URL	Download
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WSCAD Universe 2020-110

[URL](#)

[Download](#)

## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 2020-110

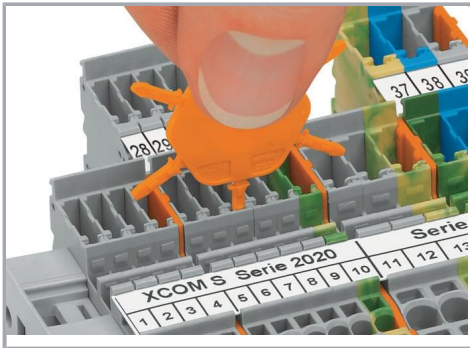
[URL](#)

[Download](#)

1-conductor female connector; Push-in CAGE CLAMP®; 1.5 mm<sup>2</sup>; Pin spacing 3.5 mm;  
10-pole; 1,50 mm<sup>2</sup>; gray

## Installation Notes

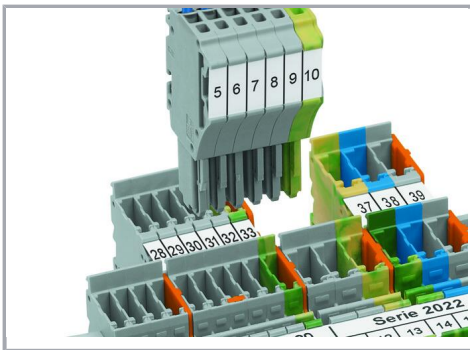
### Coding



Insert coding pin into the corresponding slot and twist it off.



Coding a female plug: remove coding finger using a suitable tool.



Insert coded female plug into X-COM®S-SYSTEM terminal block assembly.

### Locking system

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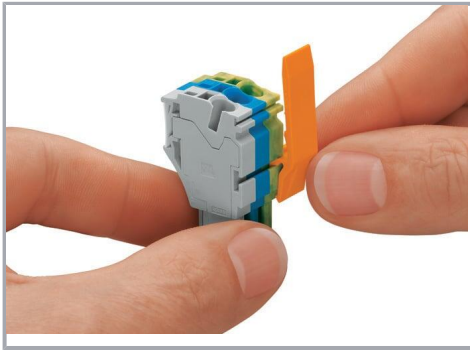
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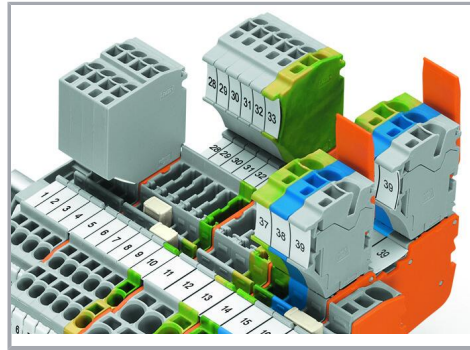
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Slide the locking lever into position.



Female plugs can be individually locked.

## Product family

X-COM S-Mini

[Show all products from the family](#)

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