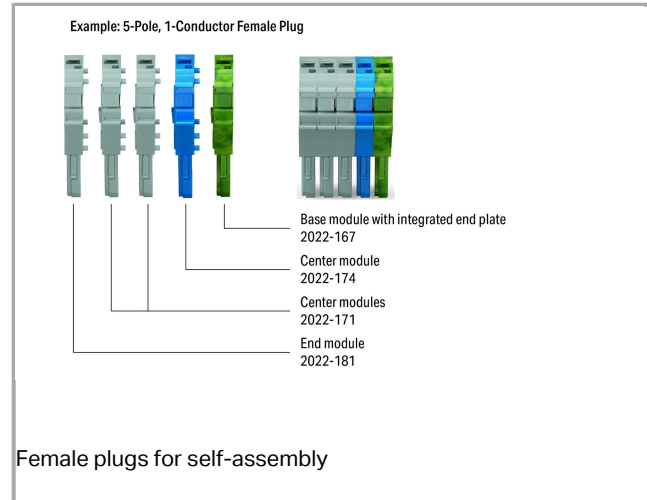
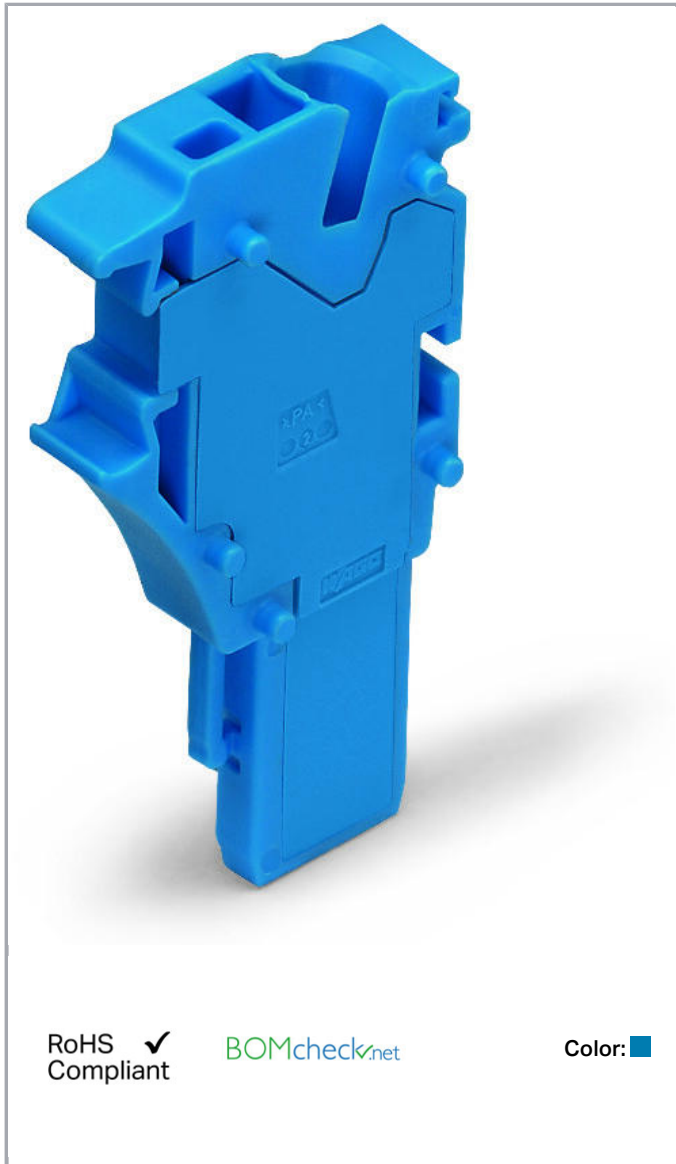


## Data sheet | Item number: 2022-164

Start module for 1-conductor female connector; with integrated end plate;  
2.5 mm<sup>2</sup>; 1-pole; 2,50 mm<sup>2</sup>; blue

[www.wago.com/2022-164](http://www.wago.com/2022-164)



RoHS Compliant

BOMcheck.net

Color:

### Item description

#### Customizing Modular Female Plugs

WAGO's modular X-COM®S-SYSTEM female plugs can be customized for applications that require a varying number of poles (e.g., when designing prototypes).

#### Modules and Pole Numbers

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

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A customized X-COM®S-SYSTEM female plug consists of:

- One base module with an integrated end plate
- Up to 13 center modules (corresponding to a 15-pole female plug = maximum pole number)
- One end module

#### Intended Use

According to EN 61984, connectors without current interrupting capacity must not be mated or unmated when live or under load.

#### Assembly

The appropriate mounting tool shall be used to ensure that the individual modules are properly attached to each other without damaging the locking latches.

#### Safety information 1:

According to EN 61984, pluggable connectors without current interrupting capacity must not be mated or unmated when live or under load.

## Data

### Electrical data

#### Ratings per IEC/EN 60664-1

Ratings per	IEC/EN 61984
Rated voltage (III / 3)	690 V
Rated impulse voltage (III / 3)	6 kV
Rated current	24 A
Rated current (2)	32 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

### Connection data

Connection technology	Push-in CAGE CLAMP®
Actuation type	Open Tool Slot Push-in
Connectable conductor materials	Copper
Nominal cross section	2,5 mm <sup>2</sup>
Solid conductor	0,25 ... 4 mm <sup>2</sup> / 22 ... 12 AWG
Solid conductor, push-in termination	0,75 ... 4 mm <sup>2</sup> / 18 ... 12 AWG
Fine-stranded conductor	0,25 ... 4 mm <sup>2</sup> / 22 ... 12 AWG
Fine-stranded conductor with ferrule with plastic collar	1 ... 2,5 mm <sup>2</sup> / 18 ... 12 AWG

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



Fine-stranded conductor with ferrule, push-in termination, from	1 ... 2,5 mm <sup>2</sup> / 18 ... 12 AWG
Strip length	10 ... 12 mm / 0.39 ... 0.47 inch
No. of poles	1
Total number of connection points	1
Total number of potentials	1
Type of wiring	Front-entry wiring
Note (conductor cross-section)	Depending on the conductor characteristic, a conductor with a smaller cross-section can also be inserted via push-in termination.

### Geometrical Data

Width	5,2 mm / 0.205 inch
Height	40,5 mm / 1.594 inch
Depth	22,4 mm / 0.882 inch

### Mechanical data

Marking level	Side marking
---------------	--------------

### Plug connection

Contact type (pluggable connector)	Female connector/socket
Connector connection type	for conductor

### Material Data

Color	blue
Insulating material	Polyamide 66 (PA 66)
Fire load	0.06 MJ
Weight	3.4 g

### Commercial data

Product Group	18 (X-COM-System)
Packaging type	BOX
Country of origin	CN
GTIN	4050821243335
Customs Tariff No.	85366990990




### Approvals / Certificates

#### Country specific Approvals





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

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Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 60947	NTR NL 7628
	CSA DEKRA Certification B.V.	C22.2 No. 158	2437422
	KEMA/KEUR DEKRA Certification B.V.	EN 61984	71- 101560

## Ship Approvals

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/A0 BV
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001V2
	LR Lloyds Register	EN 60947	91/20112 (E9)

## UL-Approvals



Logo	Approval	Additional Approval Text	Certificate name
	UR Underwriters Laboratories Inc.	UL 1059	E45172

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

## Counterpart

## Compatible products

### Locking lever

	<b>Item no.: 2022-141</b> Locking lever; can be snapped on 1-conductor female plugs; for 1-pole female plugs; gray	<a href="http://www.wago.com/2022-141">www.wago.com/2022-141</a>
	<b>Item no.: 2022-142</b> Locking lever; can be snapped on 1-conductor female plugs; for 1-pole female plugs; orange	<a href="http://www.wago.com/2022-142">www.wago.com/2022-142</a>
	<b>Item no.: 2022-151</b> Locking lever; can be snapped on 1-conductor female plugs; 2 poles and more; gray	<a href="http://www.wago.com/2022-151">www.wago.com/2022-151</a>
	<b>Item no.: 2022-152</b> Locking lever; can be snapped on 1-conductor female plugs; 2 poles and more; orange	<a href="http://www.wago.com/2022-152">www.wago.com/2022-152</a>

### Strain relief plate











	<b>Item no.: 734-326</b> Strain relief plate; gray	<a href="http://www.wago.com/734-326">www.wago.com/734-326</a>
	<b>Item no.: 734-327</b> Strain relief plate; gray	<a href="http://www.wago.com/734-327">www.wago.com/734-327</a>
	<b>Item no.: 734-328</b> Strain relief plate; gray	<a href="http://www.wago.com/734-328">www.wago.com/734-328</a>
	<b>Item no.: 734-329</b> Strain relief plate; gray	<a href="http://www.wago.com/734-329">www.wago.com/734-329</a>
	<b>Item no.: 734-430</b> Strain relief plate; gray	<a href="http://www.wago.com/734-430">www.wago.com/734-430</a>
	<b>Item no.: 734-431</b> Strain relief plate; gray	<a href="http://www.wago.com/734-431">www.wago.com/734-431</a>

### Insulation stop

	<b>Item no.: 2002-171</b> Insulation stop; 0.25 - 0.5 mm <sup>2</sup> ; 5 pieces/strip; light gray	<a href="http://www.wago.com/2002-171">www.wago.com/2002-171</a>
	<b>Item no.: 2002-172</b> Insulation stop; 0.75 - 1 mm <sup>2</sup> ; 5 pieces/strip; dark gray	<a href="http://www.wago.com/2002-172">www.wago.com/2002-172</a>

### Marking accessories

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

	<b>Item no.: 2009-110</b> Marking strips; on reel; not stretchable; plain; snap-on type; white	<a href="http://www.wago.com/2009-110">www.wago.com/2009-110</a>
	<b>Item no.: 2009-115</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	<a href="http://www.wago.com/2009-115">www.wago.com/2009-115</a>
	<b>Item no.: 2009-115/000-002</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow /000-002	<a href="http://www.wago.com/2009-115/000-002">www.wago.com/2009-115 /000-002</a>
	<b>Item no.: 2009-115/000-006</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white /000-006	<a href="http://www.wago.com/2009-115/000-006">www.wago.com/2009-115 /000-006</a>
	<b>Item no.: 2009-115/000-007</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray /000-007	<a href="http://www.wago.com/2009-115/000-007">www.wago.com/2009-115 /000-007</a>
	<b>Item no.: 2009-115/000-012</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white /000-012	<a href="http://www.wago.com/2009-115/000-012">www.wago.com/2009-115 /000-012</a>
	<b>Item no.: 2009-115/000-017</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white /000-017	<a href="http://www.wago.com/2009-115/000-017">www.wago.com/2009-115 /000-017</a>
	<b>Item no.: 2009-115/000-023</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green /000-023	<a href="http://www.wago.com/2009-115/000-023">www.wago.com/2009-115 /000-023</a>
	<b>Item no.: 2009-115/000-024</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white /000-024	<a href="http://www.wago.com/2009-115/000-024">www.wago.com/2009-115 /000-024</a>
	<b>Item no.: 2009-135</b> WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; white	<a href="http://www.wago.com/2009-135">www.wago.com/2009-135</a>
	<b>Item no.: 210-831</b> Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white	<a href="http://www.wago.com/210-831">www.wago.com/210-831</a>
	<b>Item no.: 210-832</b> Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white	<a href="http://www.wago.com/210-832">www.wago.com/210-832</a>
	<b>Item no.: 210-833</b> Marking strips; on reel; 6 mm wide; plain; Self-adhesive; white	<a href="http://www.wago.com/210-833">www.wago.com/210-833</a>
	<b>Item no.: 210-834</b> Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white	<a href="http://www.wago.com/210-834">www.wago.com/210-834</a>
	<b>Item no.: 793-5501</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white	<a href="http://www.wago.com/793-5501">www.wago.com/793-5501</a>

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

**Item no.: 793-5501/000-002**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow [www.wago.com/793-5501/000-002](http://www.wago.com/793-5501/000-002)

**Item no.: 793-5501/000-005**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red [www.wago.com/793-5501/000-005](http://www.wago.com/793-5501/000-005)

**Item no.: 793-5501/000-006**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue [www.wago.com/793-5501/000-006](http://www.wago.com/793-5501/000-006)

**Item no.: 793-5501/000-007**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray [www.wago.com/793-5501/000-007](http://www.wago.com/793-5501/000-007)

**Item no.: 793-5501/000-012**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange [www.wago.com/793-5501/000-012](http://www.wago.com/793-5501/000-012)

**Item no.: 793-5501/000-017**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green [www.wago.com/793-5501/000-017](http://www.wago.com/793-5501/000-017)

**Item no.: 793-5501/000-023**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green [www.wago.com/793-5501/000-023](http://www.wago.com/793-5501/000-023)

**Item no.: 793-5501/000-024**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet [www.wago.com/793-5501/000-024](http://www.wago.com/793-5501/000-024)

**Protective Warning Marker****Item no.: 2002-115**

Protective warning marker; with high-voltage symbol, black; for 5 terminal blocks; yellow [www.wago.com/2002-115](http://www.wago.com/2002-115)

**ferrule****Item no.: 216-241**

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 [www.wago.com/216-241](http://www.wago.com/216-241)

**Item no.: 216-242**

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 [www.wago.com/216-242](http://www.wago.com/216-242)

**Item no.: 216-243**

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 [www.wago.com/216-243](http://www.wago.com/216-243)

**Item no.: 216-244**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black [www.wago.com/216-244](http://www.wago.com/216-244)

**Item no.: 216-246**

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight [www.wago.com/216-246](http://www.wago.com/216-246)

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

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	crimped; acc. to DIN 46228, Part 4/09.90; blue	
	<b>Item no.: 216-262</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/216-262">www.wago.com/216-262</a>
	<b>Item no.: 216-263</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/216-263">www.wago.com/216-263</a>
	<b>Item no.: 216-264</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	<a href="http://www.wago.com/216-264">www.wago.com/216-264</a>
	<b>Item no.: 216-266</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	<a href="http://www.wago.com/216-266">www.wago.com/216-266</a>
	<b>Item no.: 216-284</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black	<a href="http://www.wago.com/216-284">www.wago.com/216-284</a>
	<b>Item no.: 216-286</b> Ferrule; Sleeve for 2.5 mm <sup>2</sup> / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	<a href="http://www.wago.com/216-286">www.wago.com/216-286</a>
<b>tools</b>		
	<b>Item no.: 210-720</b> Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft	<a href="http://www.wago.com/210-720">www.wago.com/210-720</a>

## Downloads

### Documentation

#### Additional Information

Technical explanations	Apr 3, 2019	pdf 2.1 MB	Download
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## CAD/CAE-Data

### CAD data

2D/3D Models 2022-164	URL	Download
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### CAE data

EPLAN Data Portal 2022-164	URL	Download
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WSCAD Universe 2022-164	URL	Download
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Subject to changes. Please also observe the further product documentation!

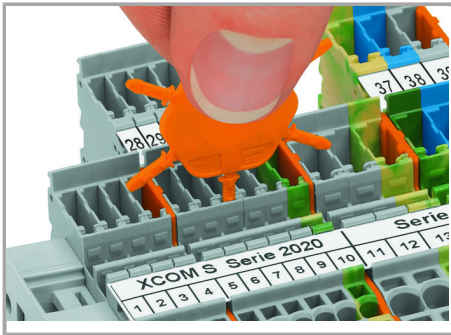
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## Installation Notes

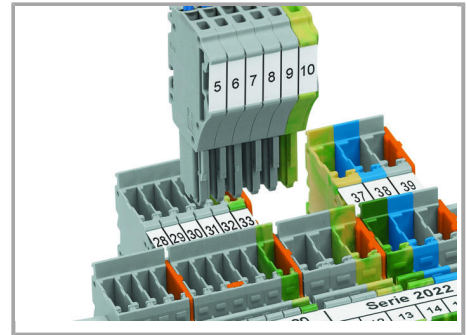
### Coding



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

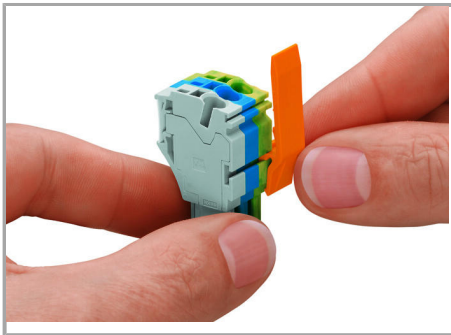


Coding a female plug: remove coding finger using a suitable tool.

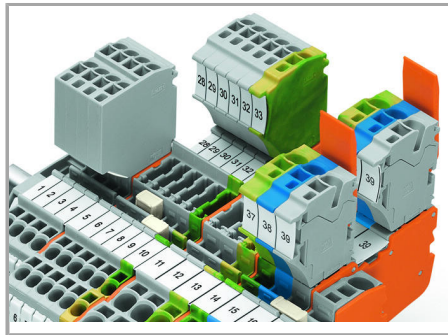


Insert coded female connector into X-COM®S-SYSTEM terminal block assembly.

### Locking lever



Slide the locking lever into position.



Female plugs can be individually locked.

## Product family

### X-COM S

[Show all products from the family](#)

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