

Color: ■ green-yellow

Customizing Modular Female Plugs

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

Modules and Pole Numbers

A customized X-COM®-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.

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

Electrical data			
Ratings per	IEC/EN 61984		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	-	-	-
Rated surge voltage	-	-	-
Rated current	-	-	-



Connection data			
Connection points	1	Connection 1	
Total number of potentials	1	Connection technology	CAGE CLAMP®
		Actuation type	Operating tool
		Connectable conductor materials	Copper
		Nominal cross-section	4 mm² / 12 AWG
		Solid conductor	0.08 ... 4 mm² / 28 ... 12 AWG
		Fine-stranded conductor	0.08 ... 4 mm² / 28 ... 12 AWG
		Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
		Pole number	1
		Wiring direction	Front-entry wiring

Physical data	
Width	5 mm / 0.197 inches
Height	45.2 mm / 1.78 inches
Depth	18.3 mm / 0.72 inches
Module width	5 mm / 0.197 inches

Mechanical data	
Variable coding	Yes
Direct ground contact to DIN-rail/drilled hole/housing	No
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
Plugging without loss of pin spacing	Yes







Material data	
Note (material data)	Information on material specifications can be found here
Color	green-yellow
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.049 MJ
Halogen-free	Yes
Weight	3 g


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



Commercial data		
Product Group	18 (X-COM-System)	
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)	250 pcs	
Packaging type	Bag	
Country of origin	DE	
GTIN	4017332591430	
Customs tariff number	85366990990	

Environmental Product Compliance		
RoHS Compliance Status	Compliant,No Exemption	

Approvals / Certificates		
General approvals		Declarations of conformity and manufacturer's declarations
<div><div></div></div>		
Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7626
CCA DEKRA Certification B.V.	EN 61984	2190419.02
CCA DEKRA Certification B.V.	EN 61984	NL-47799/A1
CSA CSA Group	C22.2	1101144
KEMA/KEUR DEKRA Certification B.V.	EN 60947	2190419.01
UL Underwriters Laboratories Inc.	UL 1977	E 45171
UR Underwriters Laboratories Inc.	UL 1059	E45172
Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Downloads		
Environmental Product Compliance		
Compliance Search		
Environmental Product Compliance 769-503/000-016		

Documentation				
Bid Text				
769-503/000-016	19.02.2019	xml 3.08 KB		
769-503/000-016	04.10.2017	doc 25.50 KB		

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 769-503/000-016	EPLAN Data Portal 769-503/000-016
	WSCAD Universe 769-503/000-016
	ZUKEN Portal 769-503/000-016

1 Compatible Products
1.1 Optional Accessories
1.1.1 Cover
1.1.1.1 Cover



Item No.: 769-436
Jumper cover; for 1-conductor female plugs; for 5 poles; gray

1.1.2 Ferrule
1.1.2.1 Ferrule



Item No.: 216-301
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



Item No.: 216-302
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



Item No.: 216-201
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white



Item No.: 216-101
Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored



Item No.: 216-202
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



Item No.: 216-102
Ferrule; Sleeve for 0.75 mm² / AWG 20; un-insulated; electro-tin plated; silver-colored



Item No.: 216-203
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



Item No.: 216-103
Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated



Item No.: 216-204
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



Item No.: 216-104
Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; silver-colored



Item No.: 216-206
Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; blue



1.1.3 Insulation stop

1.1.3.1 Insulation stop



[Item No.: 769-470](#)
Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 5 pieces/strip; white



[Item No.: 769-471](#)
Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray



[Item No.: 769-472](#)
Insulation stop; 0.75 - 1 mm²; 5 pieces/strip; dark gray

1.1.4 Jumper

1.1.4.1 Jumper



[Item No.: 769-402](#)
Jumper; insulated; gray

1.1.5 Locking system

1.1.5.1 Locking system



[Item No.: 769-428](#)
Locking lever; for female connectors; 1 part; Pin spacing 5 mm; 1-pole; gray



[Item No.: 769-429](#)
Locking lever; for female connectors; 1 part; Pin spacing 5 mm; 1-pole; orange



[Item No.: 769-430](#)
Locking lever; for female connectors; 1 part; Pin spacing 5 mm; 2-pole; gray



[Item No.: 769-431](#)
Locking lever; for female connectors; 1 part; Pin spacing 5 mm; 2-pole; orange

1.1.6 Marking

1.1.6.1 Label



[Item No.: 210-805](#)
Labels; for Smart Printer; permanent adhesive; 6 x 15 mm; white



[Item No.: 210-805/000-002](#)
Labels; for Smart Printer; permanent adhesive; 6 x 15 mm; yellow

1.1.6.2 Marker



[Item No.: 2009-145](#)
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



[Item No.: 248-501](#)
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

1.1.6.3 Marking strip



[Item No.: 210-831](#)
Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white



[Item No.: 210-832](#)
Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white



1.1.7 Protective warning marker

1.1.7.1 Cover



Item No.: 280-415
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.1.8 Strain relief

1.1.8.1 Strain relief



Item No.: 769-1610
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 10-pole; gray



Item No.: 769-1611
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 11-pole; gray



Item No.: 769-1612
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 12-pole; gray



Item No.: 769-1613
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 13-pole; gray



Item No.: 769-1614
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 14-pole; gray



Item No.: 769-1615
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 15-pole; gray



Item No.: 769-1602
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 2-pole; gray



Item No.: 769-1603
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 3-pole; gray



Item No.: 769-1604
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 4-pole; gray



Item No.: 769-1605
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 5-pole; gray



Item No.: 769-1606
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 6-pole; gray



Item No.: 769-1607
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 7-pole; gray



Item No.: 769-1608
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 8-pole; gray



Item No.: 769-1609
Strain relief housing; for female and male connectors; 2 parts; Pin spacing 5 mm; 9-pole; gray



Item No.: 769-414
Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 10- to 15-pole; gray



Item No.: 769-410
Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 1-pole; gray



Item No.: 769-411
Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 2- to 3-pole; gray



Item No.: 769-412
Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 4- to 5-pole; gray



Item No.: 769-413
Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 6- to 9-pole; gray

1.1.9 Test and measurement

1.1.9.1 Testing accessories



Item No.: 210-136
Test plug; 2 mm Ø; with 500 mm cable; red

1.1.10 Tool

1.1.10.1 Operating tool

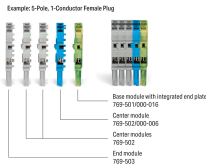


Item No.: 210-490
Operating tool

Item No.: 769-434
Operating tool; made of insulating material; 1-way; loose; white

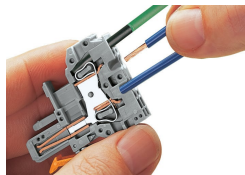
Installation Notes

Installation



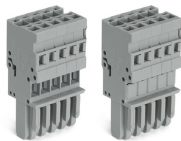
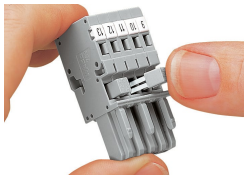
Female plugs for self-assembly

Conductor termination



CAGE CLAMP® connection
Female plug: Inserting/removing a conductor via operating tool.
Operation 90° to conductor is also possible.
With ferruled conductors, it is necessary to use a terminal block one size smaller than the conductor's nominal cross-section.

Commoning



Commoning 1-conductor female plugs via miniature adjacent jumpers.

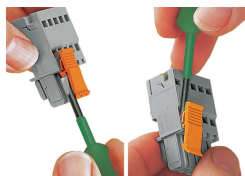
Jumper cover for 1-conductor female plugs

Coding



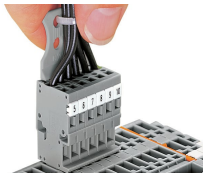
Coding a female plug by removing coding finger(s) via cutting tool. Do not remove the first and last coding fingers or use an additional locking lever.

Locking system



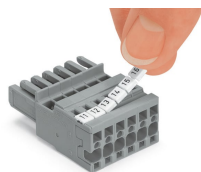
Locking/releasing a lever.

Strain relief



Removing a female plug via conductor bundle provided with strain relief plate.

Marking



Labeling a female plug with CAGE CLAMP® connection via Mini-WSB Quick Markers.