



Color: ■ gray

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	500 V	-	-
Rated surge voltage	6 kV	-	-
Rated current	32 A	-	-



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	gray
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.061 MJ
Halogen-free	Yes
Weight	2.9 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	4017332331432	
Customs tariff number	85366990990	

Environmental Product Compliance		
RoHS Compliance Status	Compliant,No Exemption	

Approvals / Certificates		
General approvals		Declarations of conformity and manufacturer's declarations
		
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	



Documentation

Bid Text			
769-503	19.02.2019	xml 3.07 KB	
769-503	04.10.2017	doc 25.50 KB	

CAD/CAE-Data

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

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

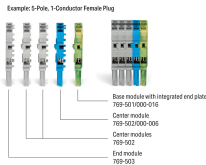


[Item No.: 210-490](#)
Operating tool

[Item No.: 769-434](#)
Operating tool; made of insulating material; 1-way; loose; white

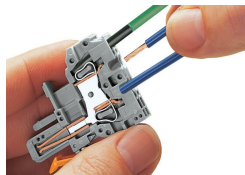
Installation Notes

Installation



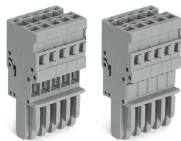
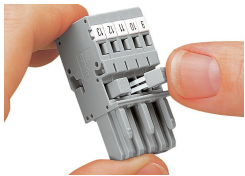
Female plugs for self-assembly

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.

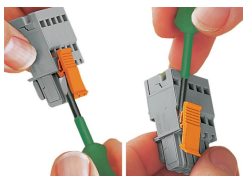
Jumper cover for 1-conductor female plugs

Coding



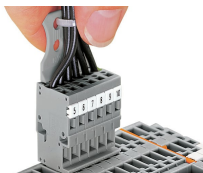
Coding a female plug by removing coding finger(s) via cutting tool. Do not remove the first and last coding fingers or use an additional locking lever.

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.