

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	2	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	35.9 mm / 1.413 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	0.08 MJ
Halogen-free	Yes
Weight	4.8 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	PL
GTIN	4017332331463
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	Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7626	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
CCA DEKRA Certification B.V.	EN 61984	2190419.02	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
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			



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1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule

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

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

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

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

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

Item No.: 216-102
Ferrule; Sleeve for 0.75 mm² / AWG 20;
uninsulated; electro-tin plated; silver-colo-
red

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

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

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

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

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



1.1.2 Insulation stop

1.1.2.1 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

1.1.3 Locking system

1.1.3.1 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

1.1.4 Marking

1.1.4.1 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

1.1.4.2 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

1.1.5 Protective warning marker

1.1.5.1 Cover



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

1.1.6 Strain relief

1.1.6.1 Strain relief

<div><div>Item No.: 769-414</div><div>Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 10- to 15-pole; gray</div></div>	<div><div>Item No.: 769-410</div><div>Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 1- pole; gray</div></div>	<div><div>Item No.: 769-411</div><div>Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 2- to 3-pole; gray</div></div>	<div><div>Item No.: 769-412</div><div>Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 4- to 5-pole; gray</div></div>
<div><div>Item No.: 769-413</div><div>Strain relief plate; for female and male connectors; 1 part; Pin spacing 5 mm; 6- to 9-pole; gray</div></div>			

1.1.7 Test and measurement

1.1.7.1 Testing accessories

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

1.1.8 Tool

1.1.8.1 Operating tool

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

Installation Notes

Installation

Example 5-Pole, 1-Conductor Female Plug

Base module with integrated end plate
769-001/000-010

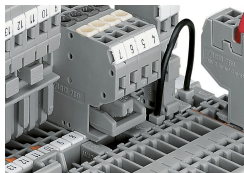
Center module
769-002/000-005

Center modules
769-002

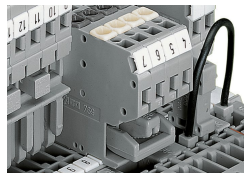
End module
769-003

Female plugs for self-assembly

Commoning



Commoning a 2-conductor female plug via staggered jumper and carrier terminal blocks via adjacent jumpers.



Commoning options of female plugs:

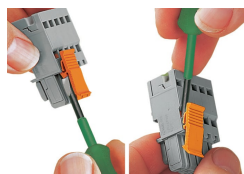
- After removal, commoned potentials still remain commoned
- Use of plug-in jumpers instead of additional wired jumpers
- Can be used as a "hardware" key for safety lockout
- Can also be used as a commoning jumper for sensor circuits or machine programming

Coding



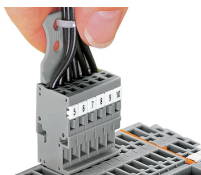
Coding a female plug by removing coding finger(s) via cutting tool. Do not remove the first and last coding fingers or use an additional locking lever.

Locking system



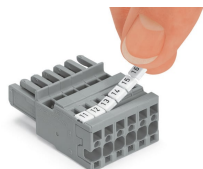
Locking/releasing a lever.

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.