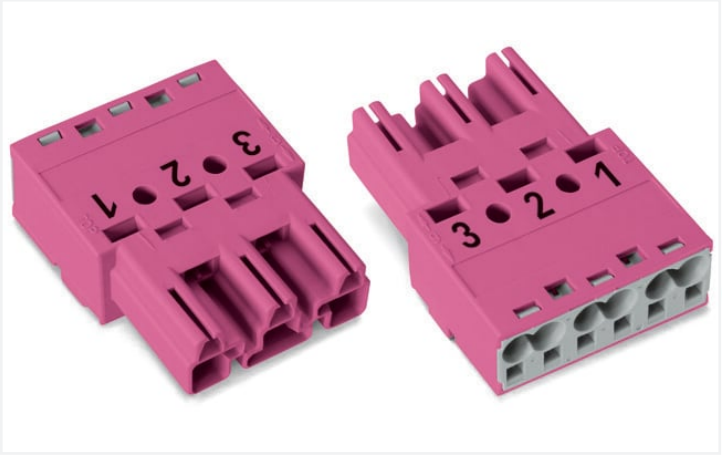
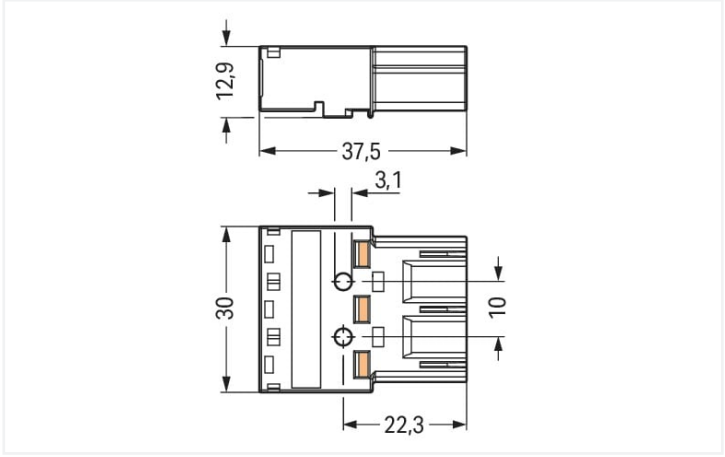
Data Sheet | Item Number: 770-293

Plug; 3-pole; Cod. B; 4,00 mm²; pink

https://www.wago.com/770-293



Color: pink



Dimensions in mm

Male connector/plug *WINSTA*® MIDI with protection against mismating

The *WINSTA*® MIDI male connector/plug with protection against mismating supports fast, reliable installation. WAGO pluggable installation connectors are used when requirements repeat or are planned on a specified grid, for example for installing grid lighting or flush-mount lighting. The color coding and mechanical coding of the pluggable installation connector ensure error-free installation of the individual components – including protection against mismating. The pluggable installation connector is protected in accordance with protection type IP20 (When mated and secured with a strain relief housing: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)). This means that users' fingers will never come into contact with live contact elements. Pluggable installation connectors with B coding from the *WINSTA*® MIDI line are available in pink, light green, or gray, allowing you to distinguish different circuits, for example for light, pumps or, sun blinds. Usage-specific pole marking is possible in addition. This pluggable installation connector can be used for a voltage load of up to 25 A. As a result, it can also be used for high power loads. The *WINSTA*® MIDI product line guarantees maximum flexibility for the electrical installation. With its Push-in CAGE CLAMP® spring pressure connection technology, it achieves time-saving, error-free installation and offers customization and flexibility for meeting all installation requirements.

WINSTA® MIDI solutions for your electrical installation – protected against mismating and maintenance-free

WINSTA® is the pluggable connection system that is perfectly tailored to the strict requirements of electrical installation. It offers fast, secure and, above all, error-free installation of components and cables. Now you can also reduce installation costs without compromising quality and safety: with protection type IP20 reduces the need for servicing and prevents unnecessary downtime.

- pluggable installation connectors with protection against mismating
- for automation controllers
- with B coding for use in automation of processes, such as lighting technology, for example
- ready to install and use immediately
- convenient installation and commissioning

Notes

Variants:	Other pole markings Other versions (or variants) can be requested from WAGO Sales or configured at https://configurator.wago.com/.

Electrical data

Ratings per	IEC/EN 60664-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	250 V	-	-
Rated surge voltage	4 kV	-	-
Rated current	25 A	-	-

Approvals per	UL 1977
Rated voltage	600 V
Rated current	23 A

General information

Note on contact resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/ socket

Connection data

Connection points	6
Total number of potentials	3

Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool Push-in
Nominal cross-section	4 mm² / 12 AWG
Solid conductor	0.5 … 4 mm² / 20 … 12 AWG
Solid conductor; push-in termination	1.5 … 4 mm² / 16 … 12 AWG
Stranded conductor	0.5 … 2.5 mm² / 20 … 14 AWG
Fine-stranded conductor	0.5 … 4 mm² / 20 … 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 … 1.5 mm² / 20 … 16 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 … 2.5 mm² / 20 … 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1.5 mm² / 16 AWG
Strip length	9 mm / 0.35 inches
Pole number	3
Conductor entry direction to mating direction	0 °

Physical data

Pin spacing	10 mm / 0.394 inches
Width	30 mm / 1.181 inches
Height	12.9 mm / 0.508 inches
Depth	37.5 mm / 1.476 inches

Mechanical data

Application	Control technology
Coding	B
Variable coding	Yes
Marking	3 2 1
Potential marking	3 2 1
Mating force of a plug-in connection	approx. 20 … 70 N (depending on pole number)
Retention force of a plug-in connection	Locked: > 80 N
Unmating force of a plug-in connection	Unlocked: approx. 20 … 70 N (depending on pole number)
Number of mating cycles	200, without resistive load
Protection type	IP20; When mated and secured with a strain relief housing: IP2xC (These compact connectors are not designed for use in open, easily accessible areas!)

Continued on next page

Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for conductor
Mismating protection	Yes
Note on mismating protection	All *WINSTA*® components are 100% protected against mismating when: a.) plugging different numbers of poles b.) plugging while rotated 180 c.) plugging while laterally staggered d.) plugging one pole
Locking lever	Can be retrofitted
Locking of plug-in connection	Locking lever
Note on locking system	All connectors for mounted installations (snap-in versions for lighting fixtures or devices, all types of PCB and distribution connectors) are factory-equipped with locking levers to ensure plugs and sockets are securely locked. Additional locking levers are only required for flying leads (plug/socket).

Material data

Note (material data)	Information on material specifications can be found here
Color	pink
Cover color	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper or copper alloy; surface-treated
Contact plating	Tin
Fire load	0.212 MJ
Weight	10 g

Environmental requirements

Processing temperature	-5 … +40 °C
Continuous operating temperature	-35 … +85 °C
Note on continuous operating temperature	Insulating parts for temperatures ≤ 105 °C

Commercial data

Product Group	20 (Winsta)
eCl@ss 10.0	27-44-06-05
eCl@ss 9.0	27-44-06-05
ETIM 8.0	EC002560
ETIM 7.0	EC002560
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	DE
GTIN	4050821446729
Customs tariff number	85366990990

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Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	IEC 61984	NL-32104
CCA DEKRA Certification B.V.	EN 61984	2173495.01
cURus Underwriters Laboratories Inc.	UL 1977	E45171
cURus Underwriters Laboratories Inc.	UL 1059	E 45172

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	19-HG1868589-PDA
DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
LR Lloyds Register	IEC 61984	LR22429487TA

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 770-293

Documentation

Bid Text

770-293	19.02.2019	xml 2.94 KB	
770-293	08.06.2015	doc 24.00 KB	

Continued on next page

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 770-293	WSCAD Universe 770-293
	ZUKEN Portal 770-293

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly

Item No.: 771-9993/105-107
pre-assembled connecting cable; Eca; Socket/open-ended; 3-pole; Cod. B; 1 m; 1,00 mm²; pink

Item No.: 771-9993/005-107
pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. B; 1 m; 1,00 mm²; pink

1.1.2 Distribution connector

Item No.: 770-1716
3-way distribution connector; 3-pole; Cod. B; 1 input; 3 outputs; pink

Item No.: 770-1766
h-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; outputs on both sides; 2 locking levers; pink

Item No.: 770-1769
h-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; outputs on both sides; 3 locking levers; for flying leads; pink

Item No.: 770-1663
h-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 2 locking levers; pink

Item No.: 770-1763
h-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; pink

Item No.: 770-1613
T-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; pink

Item No.: 770-1713
T-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; pink

1.1.3 Female connector/socket

Item No.: 770-783
Snap-in socket; 3-pole; Cod. B; 4,00 mm²; pink

Item No.: 770-883/011-000
Socket for PCBs; angled; 3-pole; Cod. B; pink

Item No.: 770-883
Socket for PCBs; straight; 3-pole; Cod. B; pink

Item No.: 770-283
Socket; 3-pole; Cod. B; 4,00 mm²; pink

1.2 Required Accessories

1.2.1 Locking system

1.2.1.1 Locking system

Item No.: 770-101
Locking lever; for flying leads; for manual operation; black

Item No.: 770-121
Locking lever; for flying leads; for manual operation; white

Item No.: 770-111
Locking lever; for flying leads; for tool operation; black

Item No.: 770-131
Locking lever; for flying leads; for tool operation; white

Continued on next page

1.3 Optional Accessories

1.3.1 Coding

1.3.1.1 Coding

Item No.: 770-401
Coding pin; for plugs; Plastic; gray

1.3.2 Cover

1.3.2.1 Cover

Item No.: 770-360
Lockout cap; for plugs; 5-pole; separable; yellow

1.3.3 Installation

1.3.3.1 Mounting accessories

Item No.: 770-318
Snap-in frame; 3-pole; 1.0 … 3.0 mm; black

Item No.: 770-338
Snap-in frame; 3-pole; 1.0 … 3.0 mm; white

1.3.4 Marking

1.3.4.1 Marker

Item No.: 770-450/000-006
Marker card; Plastic; blue

Item No.: 770-450/000-001
Marker card; Plastic; green

Item No.: 770-450/000-012
Marker card; Plastic; orange

Item No.: 770-450/000-005
Marker card; Plastic; red

Item No.: 770-450
Marker card; Plastic; white

Item No.: 770-450/000-002
Marker card; Plastic; yellow

1.3.5 Strain relief

1.3.5.1 Strain relief housing

Item No.: 770-503/021-000
Strain relief housing; 3-pole; for 1 cable; 9.0 … 13.0 mm; 71 mm; black

Item No.: 770-513/021-000
Strain relief housing; 3-pole; for 1 cable; 9.0 … 13.0 mm; 71 mm; white

Item No.: 770-503/023-000
Strain relief housing; 3-pole; for 2 cables; 4.5 … 8.0 mm; 55 mm; black

Item No.: 770-513/023-000
Strain relief housing; 3-pole; for 2 cables; 4.5 … 8.0 mm; 55 mm; white

Item No.: 770-503
Strain relief housing; 3-pole; for 2 cables; 8.0 … 11.5 mm; 55 mm; black

Item No.: 770-513
Strain relief housing; 3-pole; for 2 cables; 8.0 … 11.5 mm; 55 mm; white

Item No.: 770-513/032-000
Strain relief housing; 3-pole; for 2 cables; 8.0 … 11.5 mm; 55 mm; white

Item No.: 770-503/035-000
Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 … 11.5 mm; 48 mm; black

1.3.5.1 Strain relief housing

Item No.: 770-503/038-000
Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 … 11.5 mm; 48 mm; black

Item No.: 770-513/035-000
Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 … 11.5 mm; 48 mm; white

Item No.: 770-513/038-000
Strain relief housing; 3-pole; with locking clip; for 1 cable; 7.0 … 11.5 mm; 48 mm; white

Item No.: 770-503/032-000
Strain relief housing; 3-pole; with locking clip; for 2 cables; 8.0 … 11.5 mm; 55 mm; black

1.3.6 Tool

1.3.6.1 Operating tool

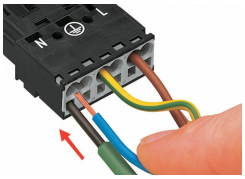
Item No.: 770-383
Operating tool; 3-way; green

Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

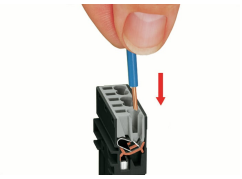
Installation Notes

Conductor termination

1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



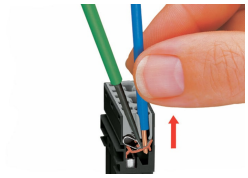
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.



Insert the stripped solid conductor until it hits the backstop.

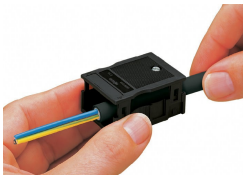
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal

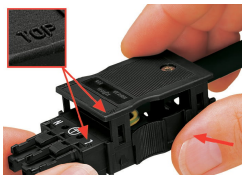


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

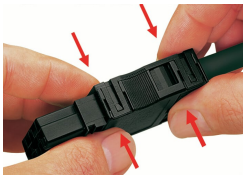
Installation



We recommend pulling the pre-latched strain relief housing over the cable prior to termination. However, the strain relief can be mounted at a later time as well.



Latch the strain relief housing onto the plug/socket. Note the “TOP” inscription.



Prepare strain relief housing by snapping together upper and bottom part.

Tighten strain relief screw with screwdriver (2.5 mm blade width).

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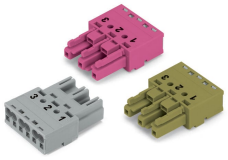
Coding

Simply cut off the coding pin from the socket.

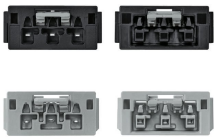
Insert coding pin into plug (break first) until it engages.

Mismating protection



B-coded connectors with different colors can be plugged together.

Important note:
Different colors and/or pole markings are used for circuit identification.
Only connectors of the same color and same pole marking must be plugged together.



B-coded connectors (shown in gray) not only differ in color, but also in their design, making them incompatible with other coded connectors.

Easy circuit identification via different marking and colors