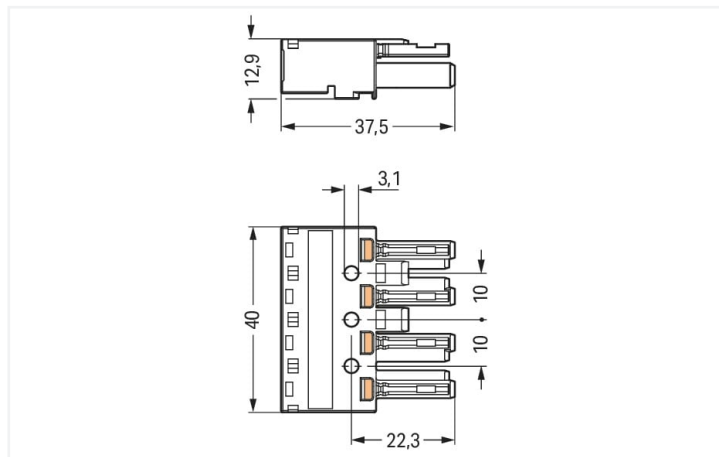


Color: ■ black



Dimensions in mm

**Female connector/socket WINSTA® MIDI with protection against mismatching**

For signal and power transmission: The WINSTA® MIDI female connector/socket with protection against mismatching. The pluggable installation connectors with spring pressure connection technology work without screw connections. They allow flexible, error-free installation in a large number of applications. For greater protection in electrical installations, the pluggable installation connector is provided with mechanical protection against mismatching. The pluggable installation connector offers touch-proof protection with live components 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!)). General mains applications for almost any domain of use can be realised with WINSTA® MIDI pluggable installation connectors with A coding. This pluggable installation connector can be employed for a current load of up to 25 A. Thus, it can also be used for high power loads. The WINSTA® MIDI product line offers total flexibility for the installation of applications. With its Push-in CAGE CLAMP® spring pressure connection technology, it ensures time-saving, error-free installation and offers customization for meeting all installation requirements.

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

The WINSTA® Pluggable Connection System is perfectly tailored to the very strict requirements of building installation. It makes electrical installation pluggable, and thus more efficient, more reliable, and error-free. Using this pre-assembled system reduces time spent on assembly and installation errors at the construction site. Choose durability and quality – with marking from WAGO makes the electrical installation of electrical components significantly easier.

- pluggable installation connectors with protection against mismatching
- simple circuits
- for any mains application
- ready to install and use immediately
- convenient installation and commissioning

**Electrical data**

Ratings per	IEC/EN 60664-1		
Overvoltage category	III	III	II
Pollution degree	3	2	2
Nominal voltage	400 V	-	-
Rated surge voltage	6 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
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## Connection data

Connection points	8	<b>Connection 1</b>	
Total number of potentials	4	Connection technology	Push-in CAGE CLAMP®
		Actuation type	Operating tool Push-in
		Nominal cross-section	4 mm <sup>2</sup> / 12 AWG
		Solid conductor	0.5 ... 4 mm <sup>2</sup> / 20 ... 12 AWG
		Solid conductor; push-in termination	1.5 ... 4 mm <sup>2</sup> / 16 ... 12 AWG
		Stranded conductor	0.5 ... 2.5 mm <sup>2</sup> / 20 ... 14 AWG
		Fine-stranded conductor	0.5 ... 4 mm <sup>2</sup> / 20 ... 12 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG
		Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm <sup>2</sup> / 20 ... 14 AWG
		Fine-stranded conductor; with ferrule; push-in termination	1.5 mm <sup>2</sup> / 16 AWG
		Strip length	9 mm / 0.35 inches
		Pole number	4
		Conductor entry direction to mating direction	0°

## Physical data

Pin spacing	10 mm / 0.394 inches
Width	40 mm / 1.575 inches
Height	12.9 mm / 0.508 inches
Depth	37.5 mm / 1.476 inches

## Mechanical data

Application	General mains applications
Coding	A
Variable coding	Yes
Marking	N 2/L 1/L'
Potential marking	N 2/L 1/L'
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!)

## Plug-in connection

Contact type (pluggable connector)	Female connector/socket
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)	<a href="#">Information on material specifications can be found here</a>
Color	black
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	0.216 MJ
Weight	12.4 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)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918252270
Customs tariff number	85366990990

## Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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## Approvals / Certificates

### General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 61535	71-123228
CCA DEKRA Certification B.V.	IEC 61535	NL -84761
cURus Underwriters Laboratories Inc.	UL 1977	E45171
cURus Underwriters Laboratories Inc.	UL 1059	E 45172
VDE VDE Prüf- und Zertifizie- rungsinstitut	EN 61984	40002889

### Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



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

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 770-204

Documentation

Bid Text			
770-204	19.02.2019	xml 2.93 KB	
770-204	10.04.2018	docx 14.36 KB	

CAD/CAE-Data

CAD data
2D/3D Models 770-204

CAE data
EPLAN Data Portal 770-204
WSCAD Universe 770-204
ZUKEN Portal 770-204

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



**Item No.: 771-9994/206-101**  
pre-assembled connecting cable; Eca;  
Plug/open-ended; 4-pole; Cod. A; H05VV-  
F 4G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; black

**Item No.: 771-9994/006-101**  
pre-assembled interconnecting cable;  
Eca; Socket/plug; 4-pole; Cod. A; H05VV-  
F 4G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; black

### 1.1.2 Distribution connector



**Item No.: 770-944**

h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 2 locking levers; black



**Item No.: 770-945**

h-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; black



**Item No.: 770-626**

T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black



**Item No.: 770-627**

T-distribution connector; 4-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black

### 1.1.3 Male connector/plug



**Item No.: 770-814/011-000**

Plug for PCBs; angled; 4-pole; Cod. A; black



**Item No.: 770-814**

Plug for PCBs; straight; 4-pole; Cod. A; black



**Item No.: 770-214**

Plug; 4-pole; Cod. A; 4,00 mm<sup>2</sup>; black



**Item No.: 770-114**

Plug; with strain relief housing; 4-pole; Cod. A; 4,00 mm<sup>2</sup>; black



**Item No.: 770-714**

Snap-in plug; 4-pole; Cod. A; 4,00 mm<sup>2</sup>; black



**Item No.: 770-714/007-000**

Snap-in plug; with direct ground contact; 4-pole; Cod. A; 4,00 mm<sup>2</sup>; black

## 1.2 Required Accessories

### 1.2.1 Cover

#### 1.2.1.1 Cover



**Item No.: 770-201**

Lockout cap; 12-pole, separable; for sockets; Plastic; black



**Item No.: 770-221**

Lockout cap; 12-pole, separable; for sockets; Plastic; white

### 1.2.2 Locking system

#### 1.2.2.1 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

### 1.2.3 Strain relief

#### 1.2.3.1 Strain relief housing



**Item No.: 770-504/023-000**

Strain relief housing; 4-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; black



**Item No.: 770-514/023-000**

Strain relief housing; 4-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; white



**Item No.: 770-504**

Strain relief housing; 4-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black



**Item No.: 770-514**

Strain relief housing; 4-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; white

### 1.3 Optional Accessories

#### 1.3.1 Cover

##### 1.3.1.1 Cover



**Item No.: 897-2005**

Protective cap; Type4; for sockets and plugs; PVC; red

#### 1.3.2 Installation

##### 1.3.2.1 Mounting accessories



**Item No.: 770-319**

Snap-in frame; 4-pole; 1.0 ... 3.0 mm; black



**Item No.: 770-339**

Snap-in frame; 4-pole; 1.0 ... 3.0 mm; white

#### 1.3.3 Marking

##### 1.3.3.1 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

#### 1.3.4 Strain relief

##### 1.3.4.1 Strain relief housing



**Item No.: 770-504/020-000**

Strain relief housing; 4-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; black

#### 1.3.5 Tool

##### 1.3.5.1 Operating tool



**Item No.: 210-719**

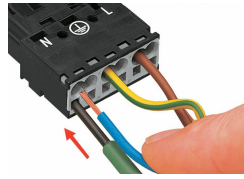
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

## 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.

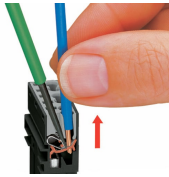


Insert the stripped solid conductor until it hits the backstop.



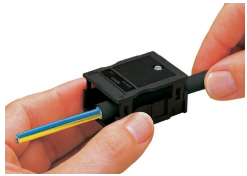
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

### Conductor removal

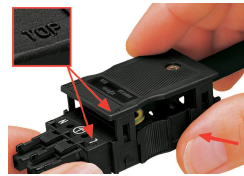


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

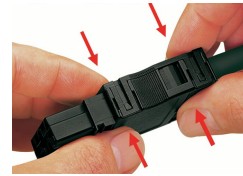
### Installation



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).