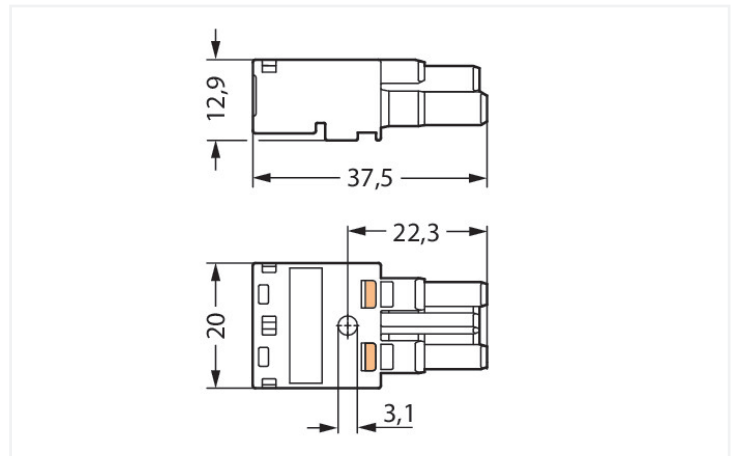




Color: ■ dark gray



Dimensions in mm

Female connector/socket WINSTA® MIDI 2-pole

The WINSTA® MIDI female connector/socket with protection against mismatching supports rapid, correct installation. The pluggable installation connectors with spring pressure connection technology work entirely without screw connections. They allow resource-efficient, error-free installation in numerous applications. The coding options reduce installation errors, allowing fast, maintenance-free wiring of all components. 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!)). That results in the fact that users' fingers will never come into contact with energised contact elements. WINSTA® MIDI pluggable installation connectors with L coding (2-pole or 5-pole) are perfect for use in supplying power to power supply units or small servo motors. This pluggable installation connector can be employed for a load of up to 25 A. As a result, it can also be used for high power loads. Our WINSTA® MIDI product line allows total flexibility for the installation of applications. Through its Push-in CAGE CLAMP® spring pressure connection technology, it ensures error-free, time-saving installation and offers flexibility for meeting an enormous variety of installation requirements.

Lower costs through fast commissioning and elimination of service expenses – solutions from WINSTA® MIDI

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It offers error-free installation of cables and components, quickly and reliably. Now you can also lower installation expenses without compromising safety and quality: with protection against mismatching reduces the need for servicing and prevents unnecessary downtime.

- effective protection against mismatching
- simple circuits
- with L coding for use in supplying power to power supply units or small servo motors
- flexible installation to save space

- rapid, structured electrical installation

Notes	
General safety information	<ol style="list-style-type: none"> 1. Only to be used by a qualified electrician or by a person electrically instructed for the task (EIP per DIN VDE 0105-100). 2. Do not install while energized or under load. 3. Use only for its intended purpose. 4. Observe applicable national regulations, standards and directives. 5. Observe the technical specifications of the products. 6. Ensure correct polarity assignment. 7. Do not use damaged or contaminated components. 8. Observe conductor types, conductor cross-sections, strip lengths and cable diameters. 9. Insert conductors up to the stop. 10. Use only with locking lever and strain relief. 11. Use original accessories only. <p>To be sold only with installation instructions!</p>

Electrical data					
Ratings per	IEC/EN 60664-1			Approvals per	UL 1977
Overvoltage category	III	III	II	Rated voltage	600 V
Pollution degree	3	2	2	Rated current	23 A
Nominal voltage	250 V	-	-		
Rated impulse withstand voltage	4 kV	-	-		
Rated current	25 A	-	-		

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

Connection Data																														
Clamping units	4	<table border="1"> <thead> <tr> <th colspan="2">Connection 1</th> </tr> </thead> <tbody> <tr> <td>Connection technology</td> <td>Push-in CAGE CLAMP®</td> </tr> <tr> <td>Actuation type</td> <td>Operating tool Push-in</td> </tr> <tr> <td>Nominal cross-section</td> <td>4 mm² / 12 AWG</td> </tr> <tr> <td>Solid conductor</td> <td>0.5 ... 4 mm² / 20 ... 12 AWG</td> </tr> <tr> <td>Solid conductor; push-in termination</td> <td>1.5 ... 4 mm² / 16 ... 12 AWG</td> </tr> <tr> <td>Stranded conductor</td> <td>0.5 ... 2.5 mm² / 20 ... 14 AWG</td> </tr> <tr> <td>Fine-stranded conductor</td> <td>0.5 ... 4 mm² / 20 ... 12 AWG</td> </tr> <tr> <td>Fine-stranded conductor; with insulated ferrule</td> <td>0.25 ... 1.5 mm² / 20 ... 16 AWG</td> </tr> <tr> <td>Fine-stranded conductor; with uninsulated ferrule</td> <td>0.25 ... 2.5 mm² / 20 ... 14 AWG</td> </tr> <tr> <td>Fine-stranded conductor; with ferrule; push-in termination</td> <td>1.5 mm² / 16 AWG</td> </tr> <tr> <td>Strip length</td> <td>9 mm / 0.35 inches</td> </tr> <tr> <td>Pole number</td> <td>2</td> </tr> <tr> <td>Conductor entry direction to mating direction</td> <td>0°</td> </tr> </tbody> </table>	Connection 1		Connection technology	Push-in CAGE CLAMP®	Actuation type	Operating tool Push-in	Nominal cross-section	4 mm ² / 12 AWG	Solid conductor	0.5 ... 4 mm ² / 20 ... 12 AWG	Solid conductor; push-in termination	1.5 ... 4 mm ² / 16 ... 12 AWG	Stranded conductor	0.5 ... 2.5 mm ² / 20 ... 14 AWG	Fine-stranded conductor	0.5 ... 4 mm ² / 20 ... 12 AWG	Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm ² / 20 ... 16 AWG	Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm ² / 20 ... 14 AWG	Fine-stranded conductor; with ferrule; push-in termination	1.5 mm ² / 16 AWG	Strip length	9 mm / 0.35 inches	Pole number	2	Conductor entry direction to mating direction	0°
Connection 1																														
Connection technology	Push-in CAGE CLAMP®																													
Actuation type	Operating tool Push-in																													
Nominal cross-section	4 mm ² / 12 AWG																													
Solid conductor	0.5 ... 4 mm ² / 20 ... 12 AWG																													
Solid conductor; push-in termination	1.5 ... 4 mm ² / 16 ... 12 AWG																													
Stranded conductor	0.5 ... 2.5 mm ² / 20 ... 14 AWG																													
Fine-stranded conductor	0.5 ... 4 mm ² / 20 ... 12 AWG																													
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm ² / 20 ... 16 AWG																													
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm ² / 20 ... 14 AWG																													
Fine-stranded conductor; with ferrule; push-in termination	1.5 mm ² / 16 AWG																													
Strip length	9 mm / 0.35 inches																													
Pole number	2																													
Conductor entry direction to mating direction	0°																													
Total number of potentials	2																													

Physical data

Pin spacing	10 mm / 0.394 inches
Width	20 mm / 0.787 inches
Height	12.9 mm / 0.508 inches
Depth	37.5 mm / 1.476 inches

Mechanical data

Use	Emergency power supply
Coding	L
Variable coding	No
Marking	L' N'
Potential marking	L' N'
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 <i>WINSTA</i> ® 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	dark gray
Cover color	gray
Material group	I
Insulation material (main housing)	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	0.102 MJ
Weight	6.6 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)
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	PL
GTIN	4050821028277
Customs tariff number	85366990990

Product Classification

UNSPSC	39121402
eCl@ss 10.0	27-44-06-05
eCl@ss 9.0	27-44-06-05
ETIM 9.0	EC002560
ETIM 10.0	EC002560
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
------------------------	-------------------------

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 61535	40029808

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	-	24-0095977-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 770-1162	↓

Documentation

Bid Text			
770-1162	19.02.2019	xml 2.94 KB	↓
770-1162	08.06.2015	doc 23.50 KB	↓

CAD/CAE-Data

CAD data	
2D/3D Models 770-1162	↓

CAE data	
EPLAN Data Portal 770-1162	↓
WSCAD Universe 770-1162	↓

1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly



Item No.: 771-8982/206-103
pre-assembled connecting cable; Eca;
Plug/open-ended; 2-pole; Cod. L; H05VV-
F 2 x 1.5 mm²; 1 m; 1,50 mm²; dark gray

Item No.: 771-8982/006-103
pre-assembled interconnecting cable;
Eca; Socket/plug; 2-pole; Cod. L; H05VV-F
2 x 1.5 mm²; 1 m; 1,50 mm²; dark gray

1.1.2 Distribution connector



Item No.: 770-7502

Linect® T-connector; 2-pole; Cod. L; 1 input; 2 outputs; white

1.1.3 Male connector/plug



Item No.: 770-1172

Plug; 2-pole; Cod. L; dark gray

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

1.2.2 Strain relief

1.2.2.1 Strain relief housing



Item No.: 770-502/042-000

Strain relief housing; 2-pole; with locking clip; for 1 cable; 5.0 ... 9.0 mm; 35 mm; black



Item No.: 770-512/042-000

Strain relief housing; 2-pole; with locking clip; for 1 cable; 5.0 ... 9.0 mm; 35 mm; white



Item No.: 770-502/041-000

Strain relief housing; 2-pole; with locking clip; for 1 cable; 7.0 ... 10.5 mm; 35 mm; black



Item No.: 770-512/041-000

Strain relief housing; 2-pole; with locking clip; for 1 cable; 7.0 ... 10.5 mm; 35 mm; white

1.3 Optional Accessories

1.3.1 Cover

1.3.1.1 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



Item No.: 897-2003

Protective cap; Type2; for sockets and plugs; PVC; red

1.3.2 Installation

1.3.2.1 Mounting accessories



Item No.: 897-2100

Mounting plate; for Snap-in; Plastic; for detectors and sensors ; Ø 200 mm; red

Item No.: 770-317

Snap-in frame; 2-pole; 1.0 ... 3.0 mm; black

Item No.: 770-337

Snap-in frame; 2-pole; 1.0 ... 3.0 mm; white

1.3.3 Tool

1.3.3.1 Operating tool



Item No.: 770-382

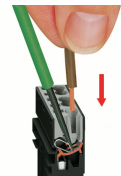
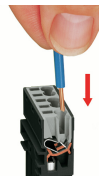
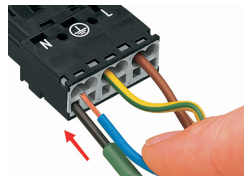
Operating tool; 2-way; green

Item No.: 210-719

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

Installation Notes

Conductor termination



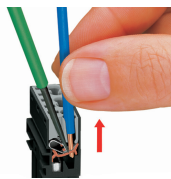
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm

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.

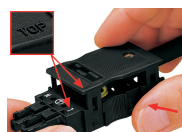
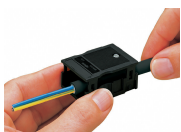
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

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).