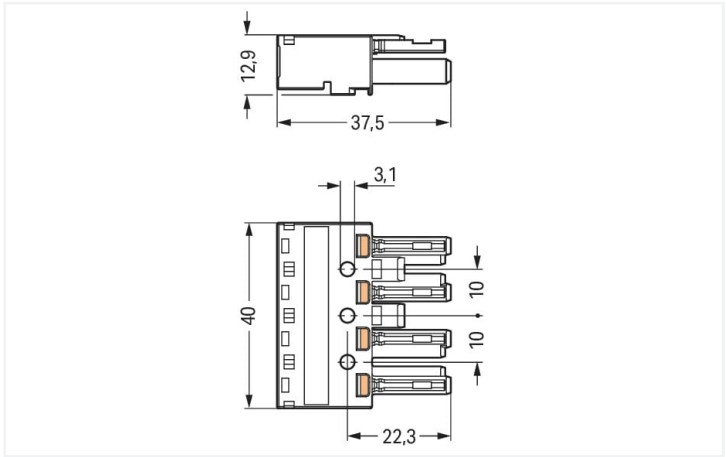




Color: ■ black



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				
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	8	<div>Connection 1</div> <table><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>4</td></tr><tr><td>Conductor entry direction to mating direction</td><td>0 °</td></tr></table>	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	4	Conductor entry direction to mating direction	0 °
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Strip length	9 mm / 0.35 inches																											
Pole number	4																											
Conductor entry direction to mating direction	0 °																											
Total number of potentials	4																											
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)		Information on material specifications can be found here
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	

Approvals / Certificates								
General approvals		Declarations of conformity and manufacturer's declarations						
   								
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 Zertifizierungsinstitut	EN 61984	40002889						
		<table><tr><th>Approval</th><th>Standard</th><th>Certificate Name</th></tr><tr><td>EU-Declaration of Conformity WAGO GmbH & Co. KG</td><td>-</td><td>-</td></tr></table>	Approval	Standard	Certificate Name	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
Approval	Standard	Certificate Name						
EU-Declaration of Conformity 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 mm²; 1 m; 1,50 mm²; black	Item No.: 771-9994/006-101 pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. A; H05VV- F 4G 1.5 mm²; 1 m; 1,50 mm²; black
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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 mm²; black



Item No.: 770-114
Plug; with strain relief housing; 4-pole; Cod. A; 4,00 mm²; black



Item No.: 770-714
Snap-in plug; 4-pole; Cod. A; 4,00 mm²; black



Item No.: 770-714/007-000
Snap-in plug; with direct ground contact; 4-pole; Cod. A; 4,00 mm²; 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

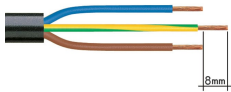
1.3.5.1 Operating tool



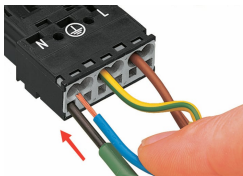
Item No.: 210-719
Operating tool; Blade: 2.5 x 0.4 mm; with a partially insulated shaft

Installation Notes

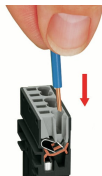
Conductor termination



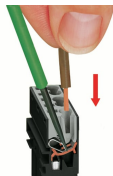
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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.

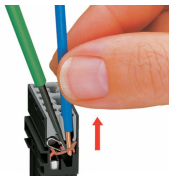


Insert the stripped solid conductor until it hits the backstop.



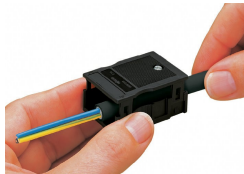
To terminate fine-stranded conductors, open the clamping unit via screwdriver (2.5 mm blade width) and insert a stripped conductor until it hits the backstop.

Conductor removal



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

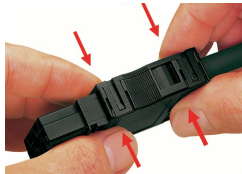
Installation



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).