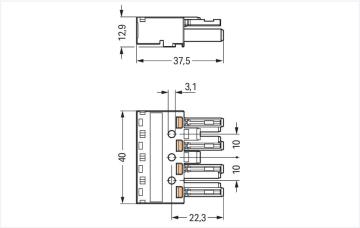
Data Sheet | Item Number: 770-224 Socket; 4-pole; Cod. A; 4,00 mm²; white

https://www.wago.com/770-224







Dimensions in mm

Female connector/socket WINSTA® MIDI with protection type IP20

Use effective pluggable connections instead of laborious screw connections: With the WINSTA® MIDI female connector/socket rated current 25 A. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to various requirements in seconds. For greater security in electrical installations, the pluggable installation connector is equipped with mechanical protection against mismating. The pluggable installation connector is protected against ingress by solid objects 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!)). Thanks to the color coding and mechanical A coding of WINSTA® MIDI pluggable installation connectors, you can clearly distinguish different circuits. Important parameters in the selection of a pluggable installation connector are the rated current and voltage: They tell us about the product's domains of use. This product has a current rating of 25 A – as a result it is also suitable for powerful loads. The WINSTA® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates precise electrification. Due to the built-in test slot, connections can be checked even when they are plugged in. That saves time and reduces installation labor and expense.

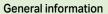
Lower costs through fast commissioning and elimination of service expenses – solutions from WINSTA® MIDI

The WINSTA® Pluggable Connection System is perfectly tailored to the very strict requirements of building installation. It makes electrical installation pluggable, and consequently more efficient, even more reliable, and error-free. Using this pre-assembled system decreases assembly times and installation errors at the construction site. Now you can also reduce installation costs without compromising safety and quality: The *WINSTA®* MIDI pluggable installation connector with protection against mismating reduces the need for servicing and prevents unnecessary downtime.

- · protection against mismating eliminates errors
- for automation controllers
- with A coding for use in many general mains applications
- · custom-engineered solutions
- · fast, secure installation

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	400 V	-	-		
Rated surge voltage	6 kV	-	-		
Rated current	25 A	-	-		

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Note on contact resistance

approx. 1 m Ω of contact resistance approx. 0.25 m Ω contact transition plug/



Connection data			
Connection points	8	Connection 1	
Total number of potentials 4	4	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 mm ² / 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!)

Data Sheet | Item Number: 770-224 https://www.wago.com/770-224



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	white
Cover color	gray
Material group	1
Insulation material	Polyamide (PA66)
Flammability class per UL94	VO
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper or copper alloy; surface-treated
Contact plating	Tin
Fire load	0.218 MJ
Weight	12.5 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	4044918252386
Customs tariff number	85366990990

https://www.wago.com/770-224



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 61984	40002889

Declarations of conformity and manufacturer's declarations

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

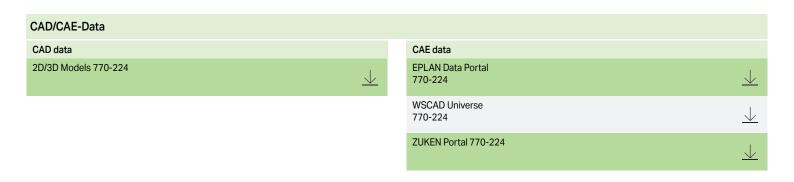
Environmental Product Compliance 770-224



https://www.wago.com/770-224



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1 Compatible Products

1.1 System counterpart

1.1.1 Cable assembly





Item No.: 771-9994/206-102

pre-assembled connecting cable; Eca; Plug/open-ended; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1 m; 1,50 mm²; white

Item No.: 771-9994/006-102

pre-assembled interconnecting cable; Eca; Socket/plug; 4-pole; Cod. A; H05VV-F 4G 1.5 mm²; 1 m; 1,50 mm²; white

1.1.2 Distribution connector









Item No.: 770-994

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

Item No.: 770-995

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

Item No.: 770-6224

Linect® T-connector; 4-pole; Cod. A; 1 input; 2 outputs; white

Item No.: 770-676

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

Item No.: 770-677

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

https://www.wago.com/770-224



1.1.3 Male connector/plug









Item No.: 770-834/011-000

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

Item No.: 770-834

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

Item No.: 770-234

Plug; 4-pole; Cod. A; 4,00 mm²; white

Item No.: 770-134

Plug; with strain relief housing; 4-pole; Cod. A; 4,00 mm²; white

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Item No.: 770-734

Snap-in plug; 4-pole; Cod. A; 4,00 mm²; white

Item No.: 770-734/007-000

Snap-in plug; with direct ground contact; 4-pole; Cod. A; 4,00 mm²; white

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

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1.3.2 Installation

1.3.2.1 Mounting accessories



Item No.: 770-319

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



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.: 770-450/000-012



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

Marker card; Plastic; orange

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Item No.: 770-450/000-006

Marker card; Plastic; blue

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



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

Item No.: 770-450/000-001

Marker card; Plastic; green

1.3.4 Tool

1.3.4.1 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.

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N/AGO

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).

Subject to changes. Please also observe the further product documentation!

Current addresses can be found at:: www.wago.com