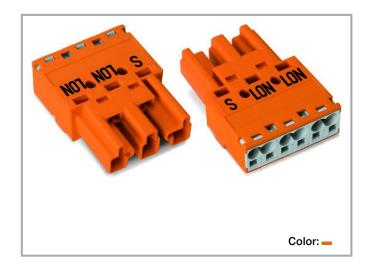
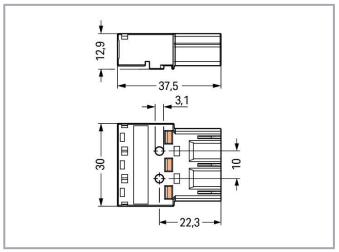
Plug; 3-pole; Cod. R; 4,00 mm<sup>2</sup>; orange

www.wago.com/770-1353







# Item description

# Male connector/plug WINSTA® MIDI with protection type IP20

For power and signal transmission: The WINSTA® MIDI male connector/plug with protection against mismating. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to an enormous variety of requirements in seconds. For greater protection in electrical installations, the pluggable installation connector is provided 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!)). The rated current and voltage are important criteria for selecting a pluggable installation connector: They provide information about possible domains of use and applications. This product has a current rating of 25 A – so it is suitable for robust loads. WINSTA® MIDI with Push-in CAGE CLAMP® spring pressure connection technology is found in a broad range of individual products you can use for quick, easy and maximally flexible electrical installation.

# Push-in CAGE CLAMP® spring pressure connection technology – pluggable installation instead of laborious screw connections!

WINSTA® is the pluggable connection system that is ideally 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 costs without compromising quality and safety: with protection against mismating reduces the need for servicing and prevents unnecessary downtime.

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

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- protection against mismating eliminates errors
- pre-assembled versions
- ready for immediate use
- quick replacement of defective units during ongoing operation

# Data

# Electrical data

# Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	250 V
Rated impulse voltage (III/3)	4 kV
Rated current	25 A
Legend (ratings)	(III / 3) ≙ Overvoltage category III / Pollution degree 3

# Ratings per UL 1977

Note for the US market	Some versions may also be used for current interruption in accordance with the UL certificate in select applications with currents below 16 A and voltages up to 600 V. For further information, please contact your local sales office.
Rated voltage (UL 1977)	600 V
Rated current UL 1977	23 A

# **General information**

Note on contact resistance	approx. 1 m $\Omega$ of contact resistance
	approx. 0.25 m $\Omega$ 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

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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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	LON Bus
Coding	R
Variable coding	No
Marking	SLONLON
Potential marking	SLONLON
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)	Male connector/plug
Connector (connection type)	for conductor
Mismating protection	Yes
Note on mismating protection	All WINSTA® components are 100% protected against mismating

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	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	orange
Insulation material	Polyamide (PA66)
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Copper or copper alloy; surface-treated
Contact plating	Tin
Fire load	0.206 MJ
Weight	9.8 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
ECCN	NO DATA
PU (SPU)	100 pcs
Packaging type	box

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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Country of origin	DE
GTIN	4044918254021
Customs tariff number	85366990990

# **Environmental Product Compliance**

**RoHS Compliance Status** Compliant, No Exemption

# Approvals / Certificates

Declarations of conformity and manufacturer's declarations

			Certificate
Logo	Approval	Additional Approval Text	name
CE	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

# Counterpart



Item no.770-1343

www.wago.com/770-1343 Socket; 3-pole; Cod. R; 4,00 mm<sup>2</sup>; orange



Item no.770-2343

www.wago.com/770-2343 Snap-in socket; 3-pole; Cod. R; 4,00 mm²; orange



Item no.770-667

T-distribution connector; 3-pole; Cod. R; 1 input; 2 outputs; 2 locking levers; orange

www.wago.com/770-667



Item no.770-670

T-distribution connector; 3-pole; Cod. R; 1 input; 2 outputs; 3 locking levers; for flying leads; orange

www.wago.com/770-670

# Required accessories

#### Locking levers

Locking system



Item no.: 770-121

Locking lever; for flying leads; for manual operation; white

www.wago.com/770-121



Item no.: 770-131

Locking lever; for flying leads; for tool operation; white

www.wago.com/770-131

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Item no.: 770-101

Locking lever; for flying leads; for manual operation; black

www.wago.com/770-101



Item no.: 770-111

Locking lever; for flying leads; for tool operation; black

www.wago.com/770-111

#### Optional accessories

N/	οu	ınt	ir	
IVI	υu		.11	Ų

Mounting accessories



Item no.: 770-318

Snap-in frame; 3-pole; 1.0 ... 3.0 mm; black

www.wago.com/770-318



Item no.: 770-338

Snap-in frame; 3-pole; 1.0 ... 3.0 mm; white

www.wago.com/770-338

Cover

Cover



Item no.: 770-360

Lockout cap; for plugs; 5-pole; separable; yellow

www.wago.com/770-360

Strain relief

Strain relief housing



Item no.: 770-503

Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; black

www.wago.com/770-503



Item no.: 770-503/023-000

Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm; 55 mm; black

www.wago.com/770-503

/023-000



Item no.: 770-503/021-000

Strain relief housing; 3-pole; for 1 cable; 9.0 ... 13.0 mm; 71 mm; black

www.wago.com/770-503

/021-000



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

www.wago.com/770-503

/035-000



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

www.wago.com/770-503

/038-000



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

www.wago.com/770-503

/032-000

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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

www.wago.com/770-513 /038-000



Item no.: 770-513

Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; white

www.wago.com/770-513



Item no.: 770-513/021-000

Strain relief housing; 3-pole; for 1 cable; 9.0 ... 13.0 mm; 71 mm; white

www.wago.com/770-513

/021-000



Item no.: 770-513/032-000

Strain relief housing; 3-pole; for 2 cables; 8.0 ... 11.5 mm; 55 mm; white

www.wago.com/770-513

/032-000



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

www.wago.com/770-513

/035-000



Item no.: 770-513/023-000

Strain relief housing; 3-pole; for 2 cables; 4.5 ... 8.0 mm; 55 mm; white

www.wago.com/770-513

/023-000

# Marking accessories

Marker



Item no.: 770-450/000-002

Marker card; Plastic; yellow

www.wago.com/770-450

/000-002



Item no.: 770-450/000-001

Marker card; Plastic; green

www.wago.com/770-450

/000-001



Item no.: 770-450/000-005

Marker card; Plastic; red

www.wago.com/770-450

/000-005



Item no.: 770-450

Marker card; Plastic; white

www.wago.com/770-450



Item no.: 770-450/000-006

Marker card; Plastic; blue

www.wago.com/770-450 /000-006



Item no.: 770-450/000-012

Marker card; Plastic; orange

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/000-012

Tool

Operating tool

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

www.wago.com/210-719



Item no.: 770-383

Operating tool; 3-way; green

www.wago.com/770-383

# Downloads Documentation

#### **Bid Text**

770-1353 X81 - Datei	2019 Feb 19	xml 3.1 kB	Download
770-1353 doc - Datei	2015 Jun 8	doc 24.1 kB	Download

# CAD/CAE-Data

#### CAE data

EPLAN Data Portal 770-1353	URL	Download
WSCAD Universe 770-1353	URL	Download

# **Environmental Product Compliance**

# Compliance Search

Environmental Product Compliance 770-1353 URL Download Plug; 3-pole; Cod. R; 4,00 mm²; orange

# **Installation Notes**

Conductor termination

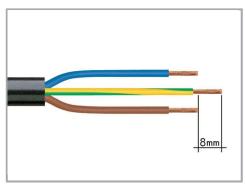
 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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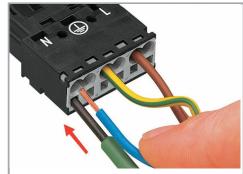
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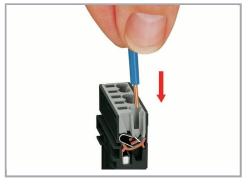




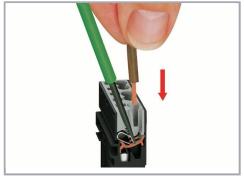
- 1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
- 2. Strip length = 9 mm
- 3. Extended ground conductor = 8 mm



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.

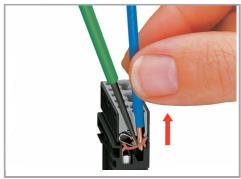


Insert the stripped solid conductor until it hits the backstop.



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.

 $\label{thm:continuity} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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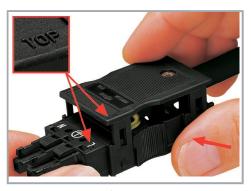
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# W/AGO

#### 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).

# **Product family**

WINSTA® MIDI Show all products from the family

 $\label{thm:condition} \textbf{Subject to changes. Please also observe the further product documentation!}$ 

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