





Item description

Female connector/socket WINSTA® MIDI 5-pole

The *WINSTA®* MIDI female connector/socket with protection against mismating allows assembly of solid and fine-stranded conductors. The pluggable installation connectors with spring pressure connection technology work entirely without screw connections. They allow resource-efficient, error-free installation in numerous possible uses. For greater protection 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!)). General mains applications for almost any domain of use can be realised with *WINSTA®* MIDI pluggable installation connector is designed for a voltage load of up to 25 A. As a result, it can also be used for high power 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.

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

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

WINSTA® is the pluggable connection system that is optimally tailored to the strict requirements of electrical installation. It ensures fast, secure and, above all, error-free installation of components and cables. Now you can also lower installation expenses without compromising quality and safety: The *WINSTA®* MIDI pluggable installation connector with protection against mismating reduces the need for servicing and prevents unnecessary downtime.

- pluggable installation connectors with protection against mismating
- for automation controllers
- with A coding for a large number of applications
- custom-engineered solutions
- convenient installation and commissioning

Data Electrical data

Ratings per IEC/EN

Ratings per	IEC/EN 60664-1
Nominal voltage (III/3)	400 V
Rated impulse voltage (III/3)	6 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

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

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Connection data

Connection points	5
Total number of potentials	5

Connection 1

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	5
Conductor entry direction to mating direction	0°

Physical data

Pin spacing	10 mm / 0.394 inches
Width	50 mm / 1.969 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
Potential marking	N ≑ L1 L2 L3
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

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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	black
Cover color	gray
Material group	I
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	0.264 MJ
Weight	15.8 g

Environmental requirements

Processing temperature

-5 ... +40 °C

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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	4044918252522
Customs tariff number	85366990990

Environmental Product Compliance

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RoHS Compliance Status	Compliant,No Exemption
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Approvals / Certificates

General approvals

			Certificate	
Logo	Approval	Additional Approval Text	name	
	CCA	IEC 61535	NL -84761	
	DEKRA Certification B.V.			
	CCA	EN 61535	71-	
KEUR	DEKRA Certification B.V.		123228	
	cURus	UL 1977	E45171	
	Underwriters Laboratories Inc. JS			
	VDE	EN 61984	40002889	
	VDE Prüf- und Zertifizierungsinstitut			
Declaration	ns of conformity and manufacturer's declarations			
			Certificate	
Logo	Approval	Additional Approval Text	name	
Subject to	changes. Please also observe the further product doo	cumentation!		
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CE

EU-Declaration of Conformity WAGO GmbH & Co. KG

Approvals for marine applications

Logo	Approval	Additional Approval Text	Certificate name
ABS.	ABS American Bureau of Shipping	-	19- HG1868589- PDA
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAE00001Z6
TIME	LR Lloyds Register	IEC 61984	LR22429487TA

Counterpart

Item no.770-115 Plug; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; black	www.wago.com/770-115
Item no.770-215 Plug; 5-pole; Cod. A; 4,00 mm²; black	www.wago.com/770-215
Item no.770-315 Plug; with strain relief housing; 5-pole; Cod. A; 4,00 mm²; black	www.wago.com/770-315
Item no.770-609 3-way distribution connector; 5-pole; Cod. A; 1 input; 3 outputs; black	www.wago.com/770-609
Item no.770-415 Plug; 5-pole; Cod. A; 4,00 mm²; black	www.wago.com/770-415
Item no.770-621 T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; black	www.wago.com/770-621
Item no.770-622 T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; black	www.wago.com/770-622

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ltem no.770-640

Three-phase to single-phase distribution connector; with phase selection; 5-pole/3-pole; Cod. A; 1 www.wago.com/770-640 input; 5 outputs; black

	Item no.770-659 3-way distribution connector; 5-pole; Cod. A; 1 input; 3 outputs; white	www.wago.com/770-659
	Item no.770-715 Snap-in plug; 5-pole; Cod. A; 4,00 mm²; black	www.wago.com/770-715
	Item no.770-815/011-000 Plug for PCBs; angled; 5-pole; Cod. A; black	www.wago.com/770-815 /011-000
	Item no.770-815 Plug for PCBs; straight; 5-pole; Cod. A; black	www.wago.com/770-815
and the second	Item no.770-715/007-000 Snap-in plug; with direct ground contact; 5-pole; Cod. A; 4,00 mm²; black	www.wago.com/770-715 /007-000
31-40	Item no.771-9995/006-101 pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. A; H05VV-F 5G 1.5 mm²; 1 m; 1,50 mm²; black	www.wago.com/771-9995 /006-101
	Item no.899-631/100-000 Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 7 outputs; Cod. A; MIDI; black	www.wago.com/899-631 /100-000
	Item no.771-9995/206-101 pre-assembled connecting cable; Eca; Plug/open-ended; 5-pole; Cod. A; H05VV-F 5G 1.5 mm ² ; 1 m; 1,50 mm ² ; black	www.wago.com/771-9995 /206-101
	Item no.899-631/105-000 Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 6 outputs; Cod. A; MIDI; black	www.wago.com/899-631 /105-000
	Item no.899-631/187-000 Distribution box; Three-phase current (400 V); 1 input; 5 outputs; Cod. A; MIDI; black	www.wago.com/899-631 /187-000
	Item no.899-631/302-000 Distribution box; Three-phase to single-phase current (400 V/230 V); 2 inputs; 6 outputs; Cod. A, P; MIDI; black	www.wago.com/899-631 /302-000
	Item no.899-631/346-000 Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 4 outputs; Cod. A; MIDI; black	www.wago.com/899-631 /346-000

Required accessories

Locking levers

Locking system

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

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Data sheet | Item number: 770-405 www.wago.com/770-405

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Sie.	Item no.: 770-121 Locking lever; for flying leads; for manual operation; whit	e www.wago.com/770-121
	Item no.: 770-131	
11	Locking lever; for flying leads; for tool operation; white	www.wago.com/770-131
	Item no.: 770-101 Locking lever; for flying leads; for manual operation; blac	k www.wago.com/770-101
	Item no.: 770-111 Locking lever; for flying leads; for tool operation; black	www.wago.com/770-111
Optional ad	ccessories	
Cover		
Cover	ltem no.: 770-201	
m.	Lockout cap; 12-pole, separable; for sockets; Plastic; bla	ck www.wago.com/770-201
- Martinet	Item no.: 770-221	
and the second second	Lockout cap; 12-pole, separable; for sockets; Plastic; wh	ite www.wago.com/770-221
	Item no.: 897-2005	
	Protective cap; Type4; for sockets and plugs; PVC; red	www.wago.com/897-200
ГооІ		
Wiring aid		
-	Item no.: 770-100 Wiring aid; 2- to 5-pole; Plastic; orange	www.wago.com/770-100
Operating t	cool	
	Item no.: 210-719 Operating tool; Blade: 2.5 x 0.4 mm; with a partially insula	ted shaft www.wago.com/210-719
Mounting		
Snap-in fra	me	
•	Item no.: 770-320 Snap-in frame; 5-pole; 1.0 3.0 mm; black	www.wago.com/770-320
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\$ \$	Item no.: 770-321 Snap-in frame; 5-pole; 0.5 2.0 mm; black	www.wago.com/770-321
ØØ	Item no.: 770-340 Snap-in frame; 5-pole; 1.0 3.0 mm; white	www.wago.com/770-340
ØØ	Item no.: 770-341 Snap-in frame; 5-pole; 0.5 2.0 mm; white	www.wago.com/770-341
Marking acce	ssories	
Marker		
Sp.	Item no.: 770-450/000-002 Marker card; Plastic; yellow	www.wago.com/770-450 /000-002
F	Item no.: 770-450/000-001 Marker card; Plastic; green	www.wago.com/770-450 /000-001
5 pp	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
1	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	www.wago.com/770-450 /000-012

Downloads Documentation

Bid Text

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770-405 X81 - Datei	2019 Feb 19	xml 3.0 kB	Download
770-405 doc - Datei	2015 Jun 8	doc 24.1 kB	Download
CAD/CAE-Data			
CAE data			
WSCAD Universe 770-405		URL	Download
ZUKEN Portal 770-405		URL	Download
EPLAN Data Portal 770-405		URL	Download
CAD data			
2D/3D Models 770-405		URL	Download
Environmental Product Compliance			
Compliance Search			
Environmental Product Compliance 770-405 Socket; 5-pole; Cod. A; 4,00 mm²; black		URL	Download

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Installation Notes

Conductor termination

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1. Strip length, outer insulation = 35 mm (2pole), 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

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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.

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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

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