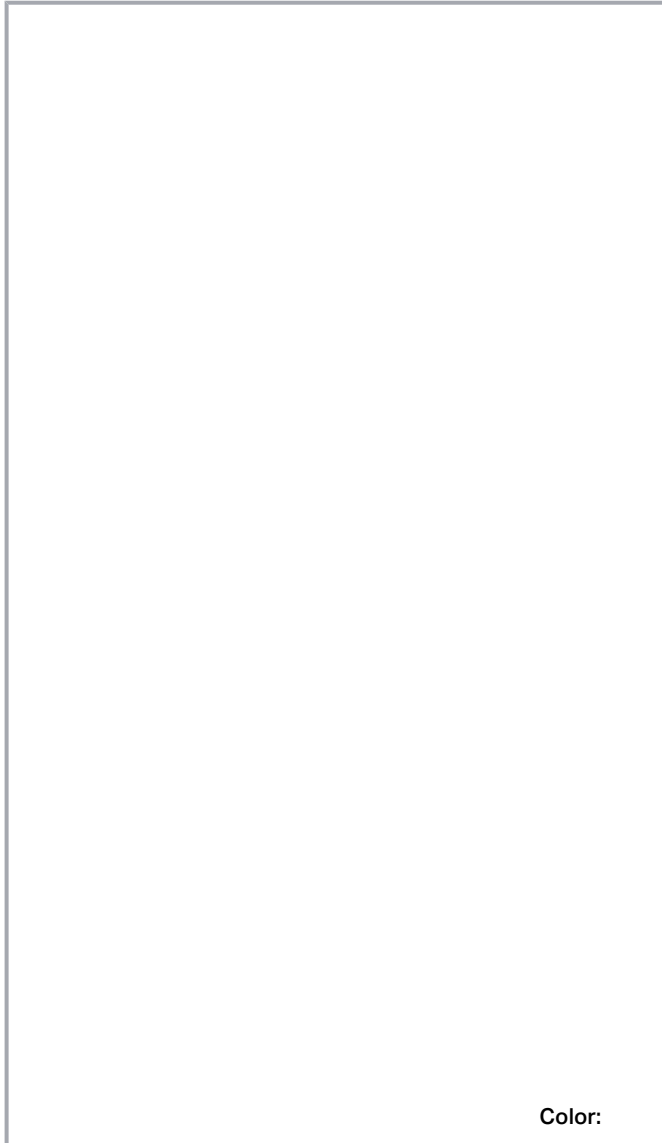


Data sheet | Item number: 770-255
Plug; 5-pole; Cod. B; 4,00 mm²; gray

www.wago.com/770-255



Color:



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

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Item description

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

The *WINSTA*® MIDI male connector/plug with protection type IP20 supports fast, reliable installation. WAGO pluggable installation connectors are used when requirements repeat or are planned on a defined pattern, for example for installing grid lighting or flush-mount lighting. For greater protection in electrical installations, the pluggable installation connector is equipped with mechanical protection against mismating. The pluggable installation connector offers protection against contact 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!)). Solutions like the *WINSTA*® MIDI pluggable installation connectors with B coding are suitable for applications related to process control, such as for lighting or in data networks. This pluggable installation connector can be used for electrical currents up to 25 A. Thus the product is ideally suitable for high power loads. The *WINSTA*® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates safe electrification. Thanks to the integrated test slot, it is possible to check connections even when they are plugged in. That saves time and reduces installation labor and costs.

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

WINSTA® is the pluggable connection system that is perfectly tailored to the strict requirements of electrical installation. It offers fast, secure and, above all, error-free installation of components and cables. Take advantage of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with protection against mismating from WAGO.

-
- pluggable installation connectors with protection against mismating
- simple circuits
- for automation controllers
- custom-engineered solutions
- convenient installation and commissioning

Data

Notes

Variants:

Other pole markings

Other versions (or variants) can be requested from WAGO Sales or configured at <https://configurator.wago.com/>.

Electrical data

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

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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
Note (rated current)	25 A for 3-pole load 20 A for 4- and 5-pole load
Legend (ratings)	(III / 3) $\triangleq$ 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 Ω of contact resistance approx. 0.25 m Ω contact transition plug/socket
----------------------------	--

Connection data

Connection points	10
Total number of potentials	5

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

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



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	Control technology
Coding	B
Variable coding	Yes
Marking	5 4 3 2 1
Potential marking	5 4 3 2 1
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 <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

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



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	gray
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	0.419 MJ
Weight	15.9 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	4044918253987
Customs tariff number	85366990990

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

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Environmental Product Compliance

RoHS Compliance Status

Compliant, No Exemption

Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	IEC 61984	NL-32104
	CCA DEKRA Certification B.V.	EN 61984	2173495.01
	cURus Underwriters Laboratories Inc.	UL 1977	E45171
	cURus Underwriters Laboratories Inc.	UL 1059	E 45172

Declarations of conformity and manufacturer's declarations

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

Approvals for marine applications

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

Counterpart

Item no. 770-1641

T-distribution connector; 5-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; gray

www.wago.com/770-1641

Item no. 770-1741

T-distribution connector; 5-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; gray

www.wago.com/770-1741

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

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Item no.770-1744 3-way distribution connector; 5-pole; Cod. B; 1 input; 3 outputs; gray	www.wago.com/770-1744
Item no.770-245 Socket; 5-pole; Cod. B; 4,00 mm ² ; gray	www.wago.com/770-245
Item no.770-745 Snap-in socket; 5-pole; Cod. B; 4,00 mm ² ; gray	www.wago.com/770-745
Item no.770-845 Socket for PCBs; straight; 5-pole; Cod. B; gray	www.wago.com/770-845
Item no.770-845/011-000 Socket for PCBs; angled; 5-pole; Cod. B; gray	www.wago.com/770-845/011-000
Item no.771-9995/005-103 pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. B; 1 m; 1,00 mm ² ; gray	www.wago.com/771-9995/005-103
Item no.771-9995/105-103 pre-assembled connecting cable; Eca; Socket/open-ended; 5-pole; Cod. B; 1 m; 1,00 mm ² ; gray	www.wago.com/771-9995/105-103

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
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

Strain relief

Strain relief housing	
Item no.: 770-505/021-000 Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; black	www.wago.com/770-505/021-000
Item no.: 770-505/023-000 Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; black	www.wago.com/770-505/023-000
Item no.: 770-505 Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; black	www.wago.com/770-505
Item no.: 770-515 Strain relief housing; 5-pole; for 2 cables; 9.0 ... 13.0 mm; 55 mm; white	www.wago.com/770-515
Item no.: 770-515/023-000 Strain relief housing; 5-pole; for 2 cables; 5.0 ... 9.0 mm; 55 mm; white	www.wago.com/770-515/023-000

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



Item no.: 770-515/021-000

Strain relief housing; 5-pole; for 1 cable; 11.5 ... 16.5 mm; 71 mm; white

www.wago.com/770-515

/021-000

Optional accessories

Cover

Cover

Item no.: 770-360

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

www.wago.com/770-360

Item no.: 897-2005

Protective cap; Type4; for sockets and plugs; PVC; red

www.wago.com/897-2005

Tool

Operating tool

Item no.: 210-719

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

www.wago.com/210-719

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

www.wago.com/770-450/000-012

Mounting

Mounting accessories

Item no.: 770-320

Snap-in frame; 5-pole; 1.0 ... 3.0 mm; black

www.wago.com/770-320

Item no.: 770-321

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

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Snap-in frame; 5-pole; 0.5 ... 2.0 mm; black

www.wago.com/770-321**Item no.: 770-340**

Snap-in frame; 5-pole; 1.0 ... 3.0 mm; white

www.wago.com/770-340**Item no.: 770-341**

Snap-in frame; 5-pole; 0.5 ... 2.0 mm; white

www.wago.com/770-341**Coding**

Coding

Item no.: 770-401

Coding pin; for plugs; Plastic; gray

www.wago.com/770-401**Downloads****Documentation****Bid Text**

770-255 X81 - Datei	19 Feb 2019	xml 3.0 kB	Download
770-255 doc - Datei	8 Jun 2015	doc 24.6 kB	Download

CAD/CAE-Data**CAD data**

2D/3D Models 770-255	URL	Download
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CAE data

EPLAN Data Portal 770-255	URL	Download
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WSCAD Universe 770-255	URL	Download
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ZUKEN Portal 770-255	URL	Download
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Environmental Product Compliance**Compliance Search**

Environmental Product Compliance 770-255 Plug; 5-pole; Cod. B; 4,00 mm²; gray	URL	Download
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Subject to changes. Please also observe the further product documentation!



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

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



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

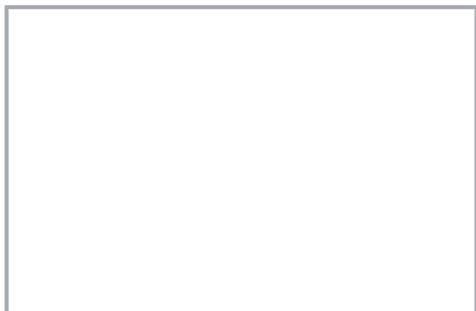
Installation



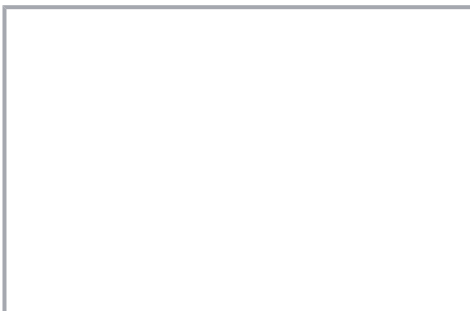
We recommend pulling the pre-latched strain relief housing over the cable prior to termination. However, the strain relief can be mounted at a later time as well.



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).

Coding

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

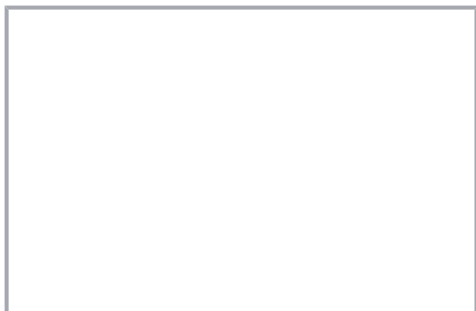


Simply cut off the coding pin from the socket.



Insert coding pin into plug (break first) until it engages.

Mismatching protection

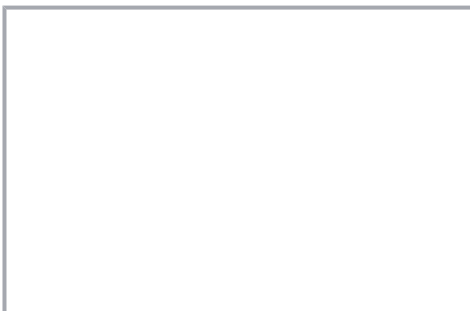


B-coded connectors with different colors can be plugged together.

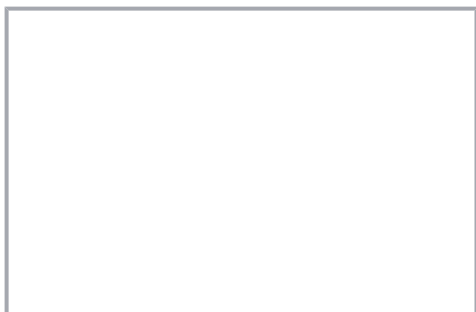
Important note:

Different colors and/or pole markings are used for circuit identification.

Only connectors of the same color and same pole marking must be plugged together.



B-coded connectors (shown in gray) not only differ in color, but also in their design, making them incompatible with other coded connectors.



Easy circuit identification via different marking and colors

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



Product family

WINSTA® MIDI

[Show all products from the family](#)

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

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