

Item description

- Protected against mismatching and maintenance-free
- Push-in CAGE CLAMP® spring pressure connection technology allows solid conductors to be simply pushed into a unit
- Two-wire connection per pole for loops or bridges
- Additional variable coding is possible
- Components can be clearly printed on and color-coded to meet custom requirements

Note:

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).

Note on mismatching protection:

All WINSTA® components are 100% protected against mismatching when:

- a.) plugging different numbers of poles
- b.) plugging while rotated 180
- c.) plugging while laterally staggered

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



d.) plugging one pole

Safety information 1:

Application note for the U.S. market (USR): 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.

Data**Electrical data**

Note on Contact Resistance	approx. 1 mΩ of contact resistance approx. 0.25 mΩ contact transition plug/socket
----------------------------	---

Ratings per IEC/EN 60664-1

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

Approvals per UL 1977

Rated voltage UL 1977	600 V
Rated current UL 1977	23 A

Connection data

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool Push-in
Nominal cross-section	4 mm ²
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
Strip length	9 mm / 0.35 inch
Note (strip length)	see also packaging or instructions
Pole No.	3
Total number of connection points	6

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

WAGO Kontakttechnik GmbH & Co. KG
 Hansastr. 27
 32423 Minden
 Phone: +49571 887-0 | Fax: +49571 887-169
 Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
 We are always happy to take your call at +49 (571) 887-44222.



Total number of potentials	3
Conductor entry direction to mating direction	0°

Geometrical Data

Pin spacing	10 mm / 0.394 inch
Width	30 mm / 1.181 inch
Height	12.9 mm / 0.508 inch
Depth	37.5 mm / 1.476 inch

Mechanical data

Coding	B
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 100, with resistive load $I_N = 25$ A, tested (4 mm ² /AWG 12)
Marking	1 2 3
Protection type	IP20
Note on protection type	In mated condition with strain relief housing: IP2xC (These compact connectors are not designed for use in open, easily accessible areas.)
Potential marking	1 2 3

Plug connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for conductor
Mismating protection	Yes
Locking of plug-in connection	locking lever
Locking lever	retrofitable

Material Data

Color	gray
Insulation material	Polyamide 66 (PA66)
Clamping spring material	Chrome nickel spring steel (CrNi)

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

Contact material	Copper or copper alloy (surface-treated)
Fire load	0.196 MJ
Weight	10 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)
Packaging type	BOX
Country of origin	DE
GTIN	4044918253963
Customs tariff number	85366990990

Approvals / Certificates

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCA DEKRA Certification B.V.	EN 61984	2173495.01
	CCA DEKRA Certification B.V.	IEC 61984	NL-32104



Ship Approvals

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	02/20050 (E6)

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



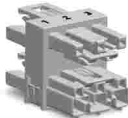
UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	cURus Underwriters Laboratories Inc.	UL 1977	E45171 Sec. 9
	cURus Underwriters Laboratories Inc.	UL 1059	20190731- E45172

Counterpart



Item no.770-1661
h-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 2 locking levers; gray www.wago.com/770-1661



Item no.770-1714
3-way distribution connector; 3-pole; Cod. B; 1 input; 3 outputs; gray www.wago.com/770-1714



Item no.770-1761
h-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; outputs on one side; 3 locking levers; for flying leads; gray www.wago.com/770-1761



Item no.770-243
Socket; 3-pole; Cod. B; 4,00 mm²; gray www.wago.com/770-243



Item no.770-743
Snap-in socket; 3-pole; Cod. B; 4,00 mm²; gray www.wago.com/770-743



Item no.770-843
Socket for PCBs; straight; 3-pole; Cod. B; gray www.wago.com/770-843

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



Item no. 770-967
T-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; 2 locking levers; gray

www.wago.com/770-967



Item no. 770-843/011-000
Socket for PCBs; angled; 3-pole; Cod. B; gray

www.wago.com/770-843/011-000



Item no. 770-970
T-distribution connector; 3-pole; Cod. B; 1 input; 2 outputs; 3 locking levers; for flying leads; gray

www.wago.com/770-970



Item no. 771-9993/005-103
pre-assembled interconnecting cable; Eca; Socket/plug; 3-pole; Cod. B; H05VV-F 3 x 1.0 mm²; 1 m; 1,00 mm²; gray

www.wago.com/771-9993/005-103



Item no. 771-9993/105-103
pre-assembled connecting cable; Eca; Socket/open-ended; 3-pole; Cod. B; H05VV-F 3 x 1.0 mm²; 1 m; 1,00 mm²; gray

www.wago.com/771-9993/105-103

Compatible products

Strain relief plate



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.: 770-503/023-000
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.: 770-503/032-000
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



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.: 770-513/021-000
Strain relief housing; 3-pole; for 1 cable; 9.0 ... 13.0 mm; 71 mm; white

www.wago.com/770-513/021-000

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



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



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.: 770-513/038-000

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

Coding



Item no.: 770-401

Coding pin; for plugs; Plastic; gray

www.wago.com/770-401

tools



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



Item no.: 770-450

Marker card; Plastic; white

www.wago.com/770-450



Item no.: 770-450/000-001

Marker card; Plastic; white

www.wago.com/770-450/000-001



Item no.: 770-450/000-002

Marker card; Plastic; white

www.wago.com/770-450/000-002



Item no.: 770-450/000-005

Marker card; Plastic; white

www.wago.com/770-450/000-005



Item no.: 770-450/000-006

Marker card; Plastic; white

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



Item no.: 770-450/000-012

Marker card; Plastic; white

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

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



Downloads Documentation

Bid Text

770-253 GAEB X81 - Datei	Feb 19, 2019	xml 3.0 kB	Download
770-253 doc - Datei	Jun 8, 2015	doc 24.6 kB	Download

CAD/CAE-Data

CAD data

2D/3D Models 770-253	URL	Download
----------------------	-----	----------

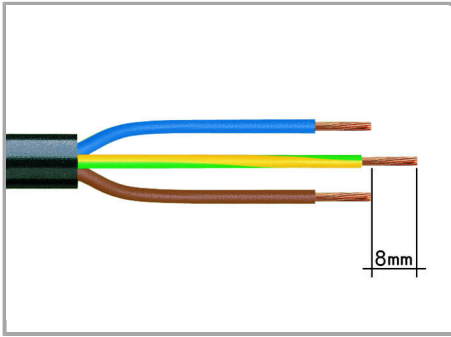
CAE data

EPLAN Data Portal 770-253	URL	Download
WSCAD Universe 770-253	URL	Download
ZUKEN Portal 770-253	URL	Download

Installation Notes

Conductor termination

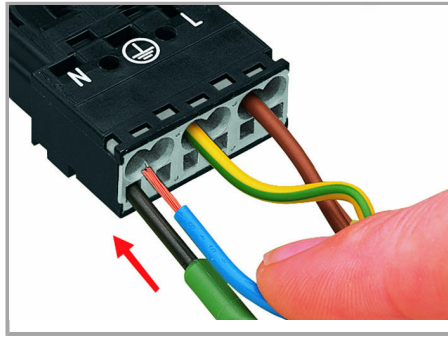
Subject to changes. Please also observe the further product documentation!



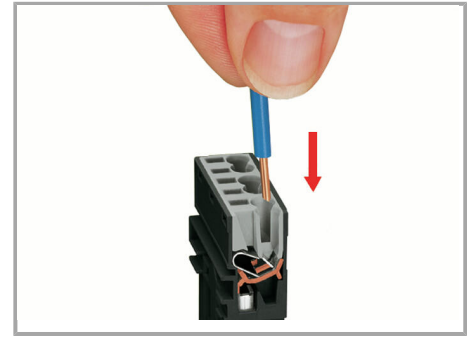
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)

2. Strip length = 9 mm

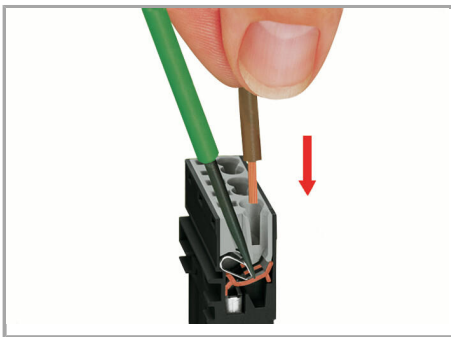
3. Extended ground conductor = 8 mm



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



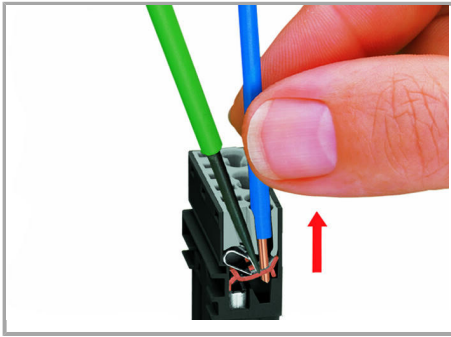
Insert stripped solid conductor until it hits backstop.



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

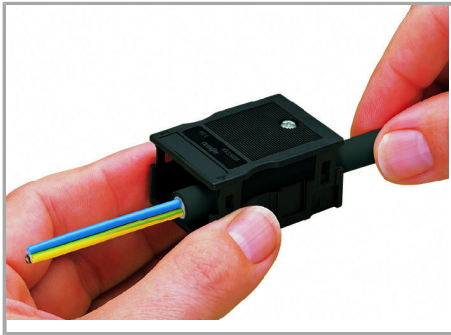
Conductor removal

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

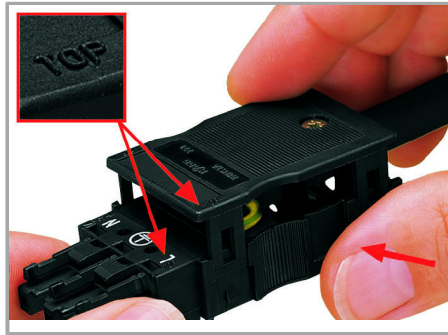


To remove the conductor, actuate the clamp via screwdriver (2.5 mm blade width) and pull out the conductor.

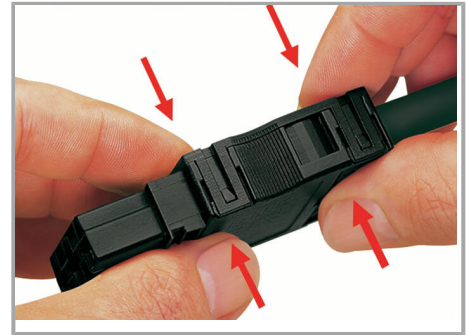
Installation



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 on the plug /socket. Note the "TOP" inscription.



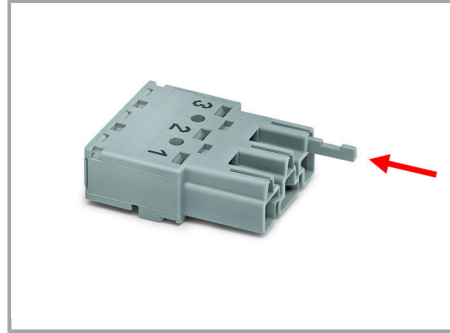
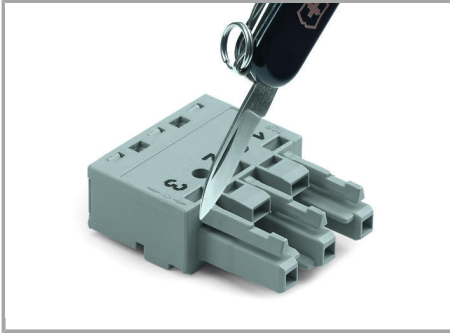
Prepare strain relief housing by snapping together upper and bottom part.



Tighten strain relief screw via screwdriver (2.5 mm blade width).

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

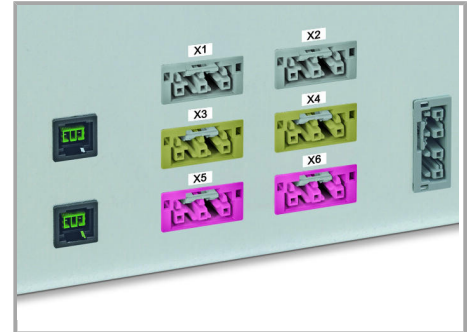
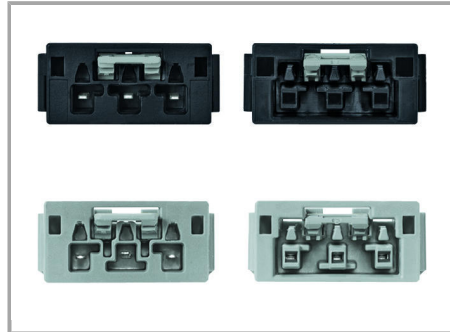
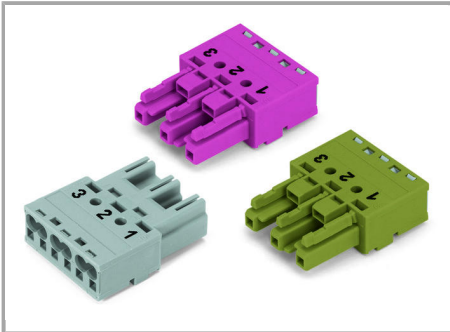
Coding



Kodierstift an der Buchse einfach abschneiden.

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

Mismatching protection



B-coded connectors with different colors can 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

Important note:

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

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

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