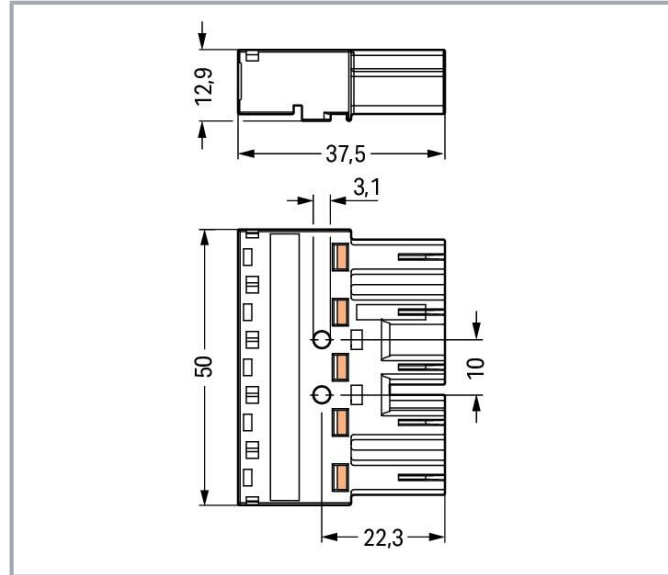
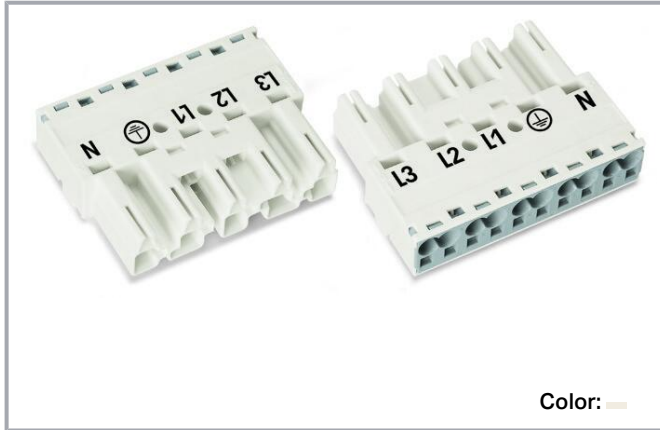


Data sheet | Item number: 770-235  
Plug; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; white

[www.wago.com/770-235](http://www.wago.com/770-235)



## Item description

### Male connector/plug *WINSTA*® MIDI rated current 25 A

The *WINSTA*® MIDI male connector/plug with protection against mismatching provides the foundation for assembly of fine-stranded and solid conductors. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to make connections according to an enormous variety of requirements in seconds. The coding options reduce installation errors, allowing fast, secure wiring of all components. The pluggable installation connector offers touch-proof protection 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!)). General mains applications for almost any domain of use can be realised with *WINSTA*® MIDI pluggable installation connectors with A coding. This pluggable installation connector can be used for electrical currents up to 25 A. Thus the product is especially suitable for high power loads. The *WINSTA*® MIDI product line offers flexibility for the electrical installation. Through its Push-in CAGE CLAMP® spring pressure connection technology, it ensures error-free, time-saving installation and offers customization and flexibility for meeting various installation requirements.

### *WINSTA*® MIDI solutions for your electrical installation – protected against mismatching and maintenance-free

The *WINSTA*® Pluggable Connection System is ideally tailored to the strict requirements of building installation. It makes electrical installation

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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

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



pluggable, and thus more efficient, even more reliable, and error-free. Using this pre-assembled system decreases assembly times and errors during installation at the construction site. Take advantage of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with protection against mismatching from WAGO.

- 
- protection against mismatching eliminates errors
- pre-assembled versions
- for any mains application
- ready to install and use immediately
- 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 information

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

#### Connection data

Connection points	10
Total number of potentials	5
PE function	Preceding PE contact

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



## Connection 1

Connection technology	Push-in CAGE CLAMP®
Actuation type	Operating tool Push-in
Nominal cross-section	4 mm <sup>2</sup> / 12 AWG
Solid conductor	0.5 ... 4 mm <sup>2</sup> / 20 ... 12 AWG
Solid conductor; push-in termination	1.5 ... 4 mm <sup>2</sup> / 16 ... 12 AWG
Stranded conductor	0.5 ... 2.5 mm <sup>2</sup> / 20 ... 14 AWG
Fine-stranded conductor	0.5 ... 4 mm <sup>2</sup> / 20 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm <sup>2</sup> / 20 ... 16 AWG
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm <sup>2</sup> / 20 ... 14 AWG
Fine-stranded conductor; with ferrule; push-in termination	1.5 mm <sup>2</sup> / 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	L3 L2 L1 ⊥ N
Potential marking	L3 L2 L1 ⊥ N
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!)

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



## Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for conductor
Mismating protection	Yes
Note on mismating protection	All WINSTA <sup>®</sup> 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	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	0.357 MJ
Weight	16.3 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

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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

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

## 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)	50 pcs
Packaging type	box
Country of origin	DE
GTIN	4044918254601
Customs tariff number	85366990990

## 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 61535	NL -84761
	CCA DEKRA Certification B.V.	EN 61535	71-123228
	cURus Underwriters Laboratories Inc.	UL 1977	E45171
	cURus Underwriters Laboratories Inc.	UL 1059	E 45172
	VDE VDE Prüf- und Zertifizierungsinstitut	EN 61984	40002889

## Declarations of conformity and manufacturer's declarations




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

WAGO GmbH & Co. KG  
 Hansastr. 27  
 32423 Minden  
 Phone: +49571 887-0 | Fax: +49571 887-169  
 Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)







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

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










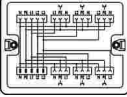
### Approvals for marine applications

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

	<b>Item no.770-125</b> Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm <sup>2</sup> ; white	<a href="http://www.wago.com/770-125">www.wago.com/770-125</a>
	<b>Item no.770-325</b> Socket; with strain relief housing; 5-pole; Cod. A; 4,00 mm <sup>2</sup> ; white	<a href="http://www.wago.com/770-325">www.wago.com/770-325</a>
	<b>Item no.770-425</b> Socket; 5-pole; Cod. A; 4,00 mm <sup>2</sup> ; white	<a href="http://www.wago.com/770-425">www.wago.com/770-425</a>
	<b>Item no.770-225</b> Socket; 5-pole; Cod. A; 4,00 mm <sup>2</sup> ; white	<a href="http://www.wago.com/770-225">www.wago.com/770-225</a>
	<b>Item no.770-6225</b> Linect® T-connector; 5-pole; Cod. A; 1 input; 2 outputs; white	<a href="http://www.wago.com/770-6225">www.wago.com/770-6225</a>
	<b>Item no.770-671</b> T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 2 locking levers; white	<a href="http://www.wago.com/770-671">www.wago.com/770-671</a>




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

	<p><b>Item no.770-661</b> Three-phase to single-phase distribution connector; with phase selection; 5-pole/3-pole; Cod. A; 1 input; 2 outputs; with cable connection on the input side; white</p>	<a href="http://www.wago.com/770-661">www.wago.com/770-661</a>
	<p><b>Item no.770-672</b> T-distribution connector; 5-pole; Cod. A; 1 input; 2 outputs; 3 locking levers; for flying leads; white</p>	<a href="http://www.wago.com/770-672">www.wago.com/770-672</a>
	<p><b>Item no.770-690</b> Three-phase to single-phase distribution connector; with phase selection; 5-pole/3-pole; Cod. A; 1 input; 5 outputs; white</p>	<a href="http://www.wago.com/770-690">www.wago.com/770-690</a>
	<p><b>Item no.770-725</b> Snap-in socket; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; white</p>	<a href="http://www.wago.com/770-725">www.wago.com/770-725</a>
	<p><b>Item no.770-725/009-000</b> Snap-in socket; with protruding mating face; 5-pole; Cod. A; 4,00 mm<sup>2</sup>; white</p>	<a href="http://www.wago.com/770-725/009-000">www.wago.com/770-725/009-000</a>
	<p><b>Item no.770-825</b> Socket for PCBs; straight; 5-pole; Cod. A; white</p>	<a href="http://www.wago.com/770-825">www.wago.com/770-825</a>
	<p><b>Item no.770-825/011-000</b> Socket for PCBs; angled; 5-pole; Cod. A; white</p>	<a href="http://www.wago.com/770-825/011-000">www.wago.com/770-825/011-000</a>
	<p><b>Item no.771-9995/006-102</b> pre-assembled interconnecting cable; Eca; Socket/plug; 5-pole; Cod. A; H05VV-F 5G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; white</p>	<a href="http://www.wago.com/771-9995/006-102">www.wago.com/771-9995/006-102</a>
	<p><b>Item no.771-9995/106-102</b> pre-assembled connecting cable; Eca; Socket/open-ended; 5-pole; Cod. A; H05VV-F 5G 1.5 mm<sup>2</sup>; 1 m; 1,50 mm<sup>2</sup>; white</p>	<a href="http://www.wago.com/771-9995/106-102">www.wago.com/771-9995/106-102</a>
	<p><b>Item no.899-681/100-000</b> Distribution box; Three-phase to single-phase current (400 V/230 V); 1 input; 7 outputs; Cod. A; MIDI; white</p>	<a href="http://www.wago.com/899-681/100-000">www.wago.com/899-681/100-000</a>

## Required accessories

### Locking levers

Locking system

	<p><b>Item no.: 770-121</b> Locking lever; for flying leads; for manual operation; white</p>	<a href="http://www.wago.com/770-121">www.wago.com/770-121</a>
	<p><b>Item no.: 770-131</b> Locking lever; for flying leads; for tool operation; white</p>	<a href="http://www.wago.com/770-131">www.wago.com/770-131</a>
	<p><b>Item no.: 770-101</b> Locking lever; for flying leads; for manual operation; black</p>	<a href="http://www.wago.com/770-101">www.wago.com/770-101</a>

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



**Item no.: 770-111**  
Locking lever; for flying leads; for tool operation; black

[www.wago.com/770-111](http://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](http://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](http://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](http://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](http://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](http://www.wago.com/770-515/023-000)



**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](http://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](http://www.wago.com/770-360)



**Item no.: 897-2005**  
Protective cap; Type4; for sockets and plugs; PVC; red

[www.wago.com/897-2005](http://www.wago.com/897-2005)

#### Marking accessories

##### Marker



**Item no.: 770-450/000-002**  
Marker card; Plastic; yellow

[www.wago.com/770-450/000-002](http://www.wago.com/770-450/000-002)



**Item no.: 770-450/000-001**  
Marker card; Plastic; green

[www.wago.com/770-450/000-001](http://www.wago.com/770-450/000-001)

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





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

[www.wago.com/770-450/000-005](http://www.wago.com/770-450/000-005)



**Item no.: 770-450**  
Marker card; Plastic; white

[www.wago.com/770-450](http://www.wago.com/770-450)



**Item no.: 770-450/000-006**  
Marker card; Plastic; blue

[www.wago.com/770-450/000-006](http://www.wago.com/770-450/000-006)



**Item no.: 770-450/000-012**  
Marker card; Plastic; orange

[www.wago.com/770-450/000-012](http://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](http://www.wago.com/770-320)



**Item no.: 770-321**  
Snap-in frame; 5-pole; 0.5 ... 2.0 mm; black

[www.wago.com/770-321](http://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](http://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](http://www.wago.com/770-341)

## Tool

### Wiring aid



**Item no.: 770-100**  
Wiring aid; 2- to 5-pole; Plastic; orange

[www.wago.com/770-100](http://www.wago.com/770-100)

### 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](http://www.wago.com/210-719)

## Coding

### Coding



**Item no.: 770-401**  
Coding pin; for plugs; Plastic; gray

[www.wago.com/770-401](http://www.wago.com/770-401)

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



## Downloads

### Documentation

#### Bid Text

770-235 X81 - Datei	2019 Feb 19	xml 3.0 kB	Download
------------------------	-------------	---------------	----------

770-235 doc - Datei	2015 Jun 8	doc 24.1 kB	Download
------------------------	------------	----------------	----------

### CAD/CAE-Data

#### CAD data

2D/3D Models 770-235		URL	Download
----------------------	--	-----	----------

#### CAE data

ZUKEN Portal 770-235		URL	Download
----------------------	--	-----	----------

EPLAN Data Portal 770-235		URL	Download
---------------------------	--	-----	----------

WSCAD Universe 770-235		URL	Download
------------------------	--	-----	----------

#### Asset Administration Shell

Asset Administration Shell 770-235		URL	Download
------------------------------------	--	-----	----------

### Environmental Product Compliance

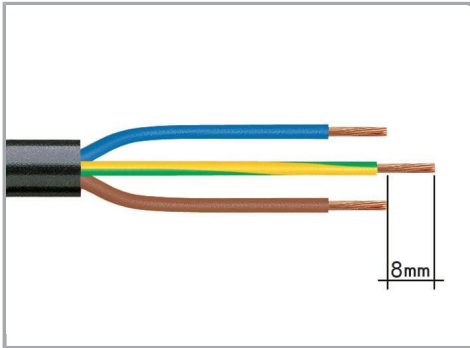
#### Compliance Search

Environmental Product Compliance 770-235 Plug; 5-pole; Cod. A; 4,00 mm <sup>2</sup> ; white		URL	Download
--	--	-----	----------

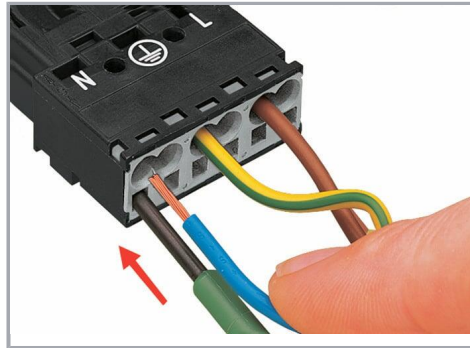
### Installation Notes

#### Conductor termination

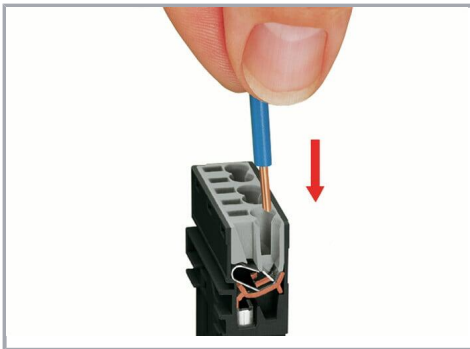
Subject to changes. Please also observe the further product documentation!



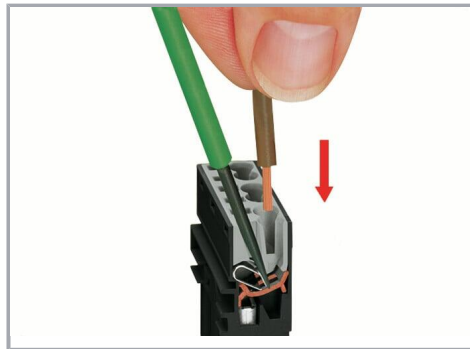
1. Strip length, outer insulation = 35 mm (2-pole), 55 mm (3- to 5-pole)
2. Strip length = 9 mm
3. Extended ground conductor = 8 mm



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

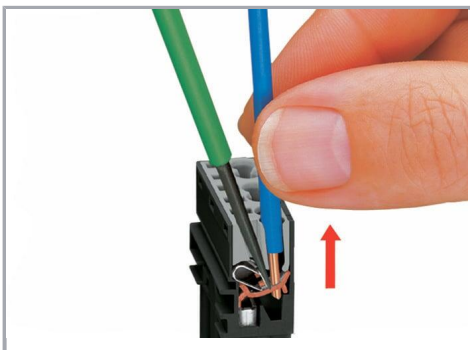


Insert the stripped solid conductor until it hits the backstop.



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.

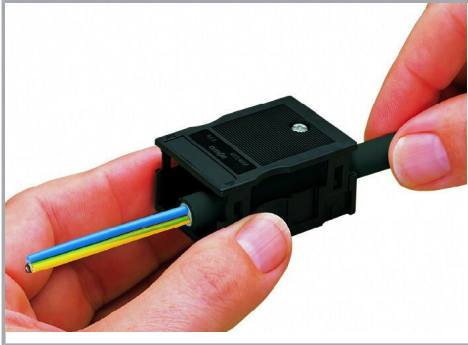
#### Conductor removal



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

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

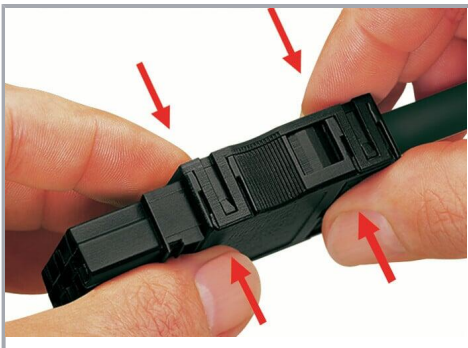
## Installation



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](#)

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