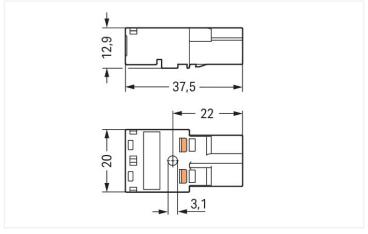
https://www.wago.com/770-252/060-000







Dimensions in mm

Male connector/plug WINSTA® MIDI with protection type IP20

For signal and power transmission: The *WINSTA*® MIDI male connector/plug B coding. Whether on PCBs, in control cabinets or for connecting lights – pluggable installation connectors from WAGO allow you to establish connections according to various requirements in next to no time. For greater security 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!)). B coding enables the *WINSTA*® MIDI pluggable installation connectors to be used for application control in automation, robotics, and mechanical engineering. This pluggable installation connector is designed for a voltage load of up to 25 A. Thus, it can also be used for high power loads. The *WINSTA*® MIDI Pluggable Connection System with Push-in CAGE CLAMP® spring pressure connection technology facilitates exemplary electrification. Due to the built-in test slot, it is possible to check connections even when they are plugged in. This saves time, labor, and money.

WINSTA® MIDI solutions for your electrical installation - protected against mismating and maintenance-free

The WINSTA® Pluggable Connection System is perfectly tailored to the very strict requirements of building installation. It makes electrical installation pluggable, and therefore faster, even more reliable, and error-free. Using this pre-assembled system decreases time spent on assembly and installation errors at the construction site. Enjoy the benefits of the pluggable version of our maintenance-free spring pressure connection technology too! Plan your installation with with protection against mismating from WAGO.

- · effective protection against mismating
- · simple circuits
- with B coding for use in process automation, such as lighting technology, for instance
- ready to install and use immediately
- · convenient installation and commissioning

Notes	
Variants:	Other pole markings Other versions (or variants) can be requested from WAGO Sales or configured at https://configurator.wago.com/.

Electrical data					
Ratings per	IEC	C/EN 60664	-1	Approvals per	UL 1977
Overvoltage category	III	III	II	Rated voltage	600 V
Pollution degree	3	2	2	Rated current	23 A
Nominal voltage	250 V	-	-		
Rated surge voltage	4 kV	-	-		
Rated current	25 A	-	-		

https://www.wago.com/770-252/060-000



#### **General information**

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

approx.  $0.25 \text{ m}\Omega$  contact transition plug/

socket

Connection 1	
Connection technology	ogy Push-in CAGE CLAMP®
Actuation type	Operating tool Push-in
Nominal cross-secti	on 4 mm² / 12 AWG
Solid conductor	0.5 4 mm² / 20 12 AWG
Solid conductor; pus	sh-in termination 1.5 4 mm² / 16 12 AWG
Stranded conductor	0.5 2.5 mm² / 20 14 AWG
Fine-stranded condu	uctor 0.5 4 mm² / 20 12 AWG
Fine-stranded condu ferrule	uctor; with insulated 0.25 1.5 mm² / 20 16 AWG
Fine-stranded conduted ferrule	uctor; with uninsula- 0.25 2.5 mm² / 20 14 AWG
Fine-stranded condupush-in termination	uctor; with ferrule; 1.5 mm² / 16 AWG
Strip length	9 mm / 0.35 inches
Pole number	2
Conductor entry direction	ection to mating di- 0 °
	Connection technology Actuation type  Nominal cross-sective Solid conductor Solid conductor; pusses Stranded conductor Fine-stranded conductor Fine-stranded conductor ferrule

Physical data	
Pin spacing	10 mm / 0.394 inches
Width	20 mm / 0.787 inches
Height	12.9 mm / 0.508 inches
Depth	37.5 mm / 1.476 inches

Mechanical data	
Application	Control technology
Coding	В
Variable coding	No
Marking	NL
Potential marking	NL
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!)

## Data Sheet | Item Number: 770-252/060-000 https://www.wago.com/770-252/060-000



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 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)	<a href="https://www.wago.com/us/material-specifications">Information on material specifications can be found here</a>
Color	gray
Cover color	gray
Material group	1
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	0.137 MJ
Weight	6.5 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	
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)	100 pcs
Packaging type	Вох
Country of origin	DE
GTIN	4050821553168
Customs tariff number	85366990990

https://www.wago.com/770-252/060-000



#### **Environmental Product Compliance**

RoHS Compliance Status Compliant, No Exemption

#### Approvals / Certificates

#### General approvals



Approval	Standard	Certificate Name
cURus Underwriters Laboratories Inc.	UL 1977	E45171
cURus Underwriters Laboratories Inc.	UL 1059	E 45172

#### Downloads

#### **Environmental Product Compliance**

# Compliance Search Environmental Product Compliance 770-252/060-000

# Documentation Bid Text 770-252/060-000 xml 2.96 KB ⊥ 770-252/060-000 doc ⊥

23.50 KB

08.06.2015

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 770-252/060-000	EPLAN Data Portal 770-252/060-000
	WSCAD Universe 770-252/060-000
	ZUKEN Portal 770-252/060-000

https://www.wago.com/770-252/060-000



#### 1 Compatible Products

#### 1.1 Required Accessories

#### 1.1.1 Locking system

#### 1.1.1.1 Locking system



Locking lever; for flying leads; for manual



Item No.: 770-121 Locking lever; for flying leads; for manual operation; white

#### Item No.: 770-111

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

#### Item No.: 770-131

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

#### 1.1.2 Strain relief

Item No.: 770-101

operation; black

#### 1.1.2.1 Strain relief housing

Item No.: 770-502/042-000



Strain relief housing; 2-pole; with locking

clip; for 1 cable; 5.0 ... 9.0 mm; 35 mm;



Item No.: 770-512/042-000 Strain relief housing; 2-pole; with locking clip; for 1 cable; 5.0 ... 9.0 mm; 35 mm;

#### Item No.: 770-502/041-000

Strain relief housing; 2-pole; with locking clip; for 1 cable; 7.0 ... 10.5 mm; 35 mm; black

#### Item No.: 770-512/041-000

Strain relief housing; 2-pole; with locking clip; for 1 cable; 7.0 ... 10.5 mm; 35 mm; white

the die

#### 1.2 Optional Accessories

#### 1.2.1 Cover

black

#### 1.2.1.1 Cover





Item No.: 770-360 Lockout cap; for plugs; 5-pole; separable; yellow

### Item No.: 897-2003

Protective cap; Type2; for sockets and plugs; PVC; red

#### 1.2.2 Installation

Item No.: 897-2100

#### 1.2.2.1 Mounting accessories



Mounting plate; for Snap-in; Plastic; for

detectors and sensors; Ø 200 mm; red





#### Item No.: 770-317

Snap-in frame; 2-pole; 1.0 ... 3.0 mm; black

#### Item No.: 770-337

Snap-in frame; 2-pole; 1.0 ... 3.0 mm; whi-

#### 1.2.3 Tool

#### 1.2.3.1 Operating tool

Operating tool; 2-way; green





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

Page 5/7

Item No.: 770-382



#### **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



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



Simply cut off the coding pin from the socket.



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

https://www.wago.com/770-252/060-000



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