Connectors for KNX/EIB Bus Coupler Units
243 Series

- Compact, 4-conductor KNX connector with PUSH WIRE® connection
- Simple push-in termination for solid conductors
- 4-conductor entries allow devices to be replaced without disrupting the KNX bus connection

Technical data:

Rating per	**IEC/EN 60664-1**				
Overvoltage category	III	III	II		
Pollution degree	3	2	2		
Rated voltage	250 V	320 V	630 V		
Rated surge voltage	4 kV	4 kV	4 kV		
Nominal current	6 A	6 A	6 A		
Approvals per	**UL/CSA**				
Use group UL 1059	B	C	D		
Rated voltage	–	–	–		
Nominal current UL	–	–	–		
Nominal current CSA	–	–	–		

Conductor data:

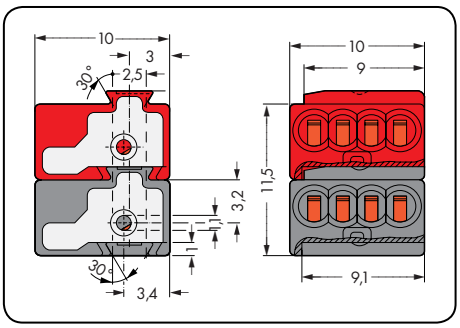
Connection technology	PUSH WIRE®
Conductor size: solid	Ø 4 x 0.6 – 0.8 mm or Ø 4 x 1.0 mm
AWG	4 x 22 – 20 "sol." or 4 x 18 "sol."
Strip length	5 – 6 mm / 0.20 – 0.24 in

Material data:

Material group	I
Insulating material	Nylon 6.6 (PA 6.6)
Flammability rating per UL 94	V0
Lower/Upper temperature limit	–60°C / +105°C
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E_{Cu})
Contact plating	tin-plated

243 Series accessories: **Page:**

Connectors for KNX bus coupler units		Description	
Ø 0.6 – 0.8 mm 320 V/ 4 kV/2 6 A	AWG 22 – 20 “sol.”		



Color	Item No.	Pack. Unit
Connectors for KNX bus coupler units, mounted, with test slot		
dark gray and red	**243-211**	250
light gray and yellow	**243-212**	250

The KNX bus system is the intelligent solution to simplify existing building installation control.
Instead of many different conventional wiring styles, the KNX bus system offers a flexible general solution for all applications in the field of switching, controlling, measuring, monitoring and signaling.

The decentralized KNX system works without a central unit. All components are active, intelligent modules. Only when using the different KNX components does the system become user-specific. For example, pairs of sensors/actuators control:

- lighting
- window blinds
- heating/ventilation
- energy management systems
- information display/transmission

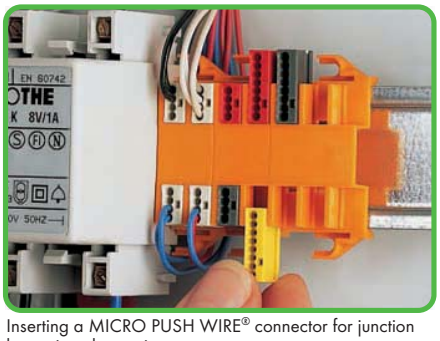
Command data is transmitted via twisted-pair bus cable, which is connected to the sensors and actuators via WAGO modules.

Sensors transmit commands as “telegrams” via the bus to the actuators, which record the information and act on the commands. To ensure that only fixed transmitters can trigger reactions in the fixed receivers, the “telegram” is provided with an address. The allocation (= addressing) is stipulated during programming.

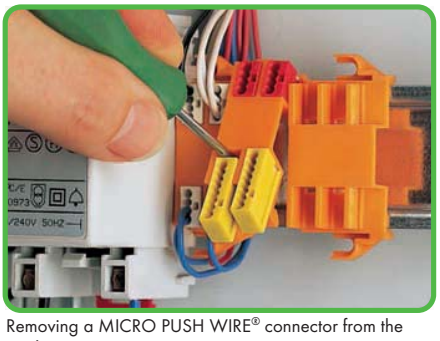
The bus system is divided into “lines” (segments). The bus lines can be wired at will acc. to the line, star or tree topology. WAGO connectors connect the different branches to one another in the junction boxes.

If the installation will be extended later on, new components can be added to the existing bus without any problems. If rooms, floors or buildings are to be used differently one day, the installations can remain unchanged. It is only necessary to reprogram the allocation of actuators to sensors.

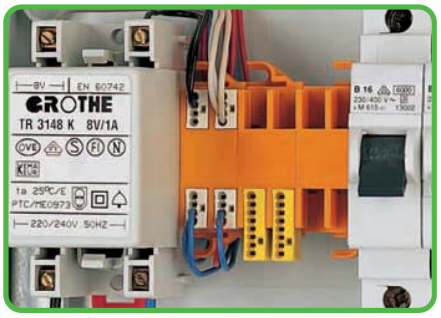
Mounting Carrier for MICRO PUSH WIRE® Connectors for DIN 35 Rail or Screw Mount, 243 Series



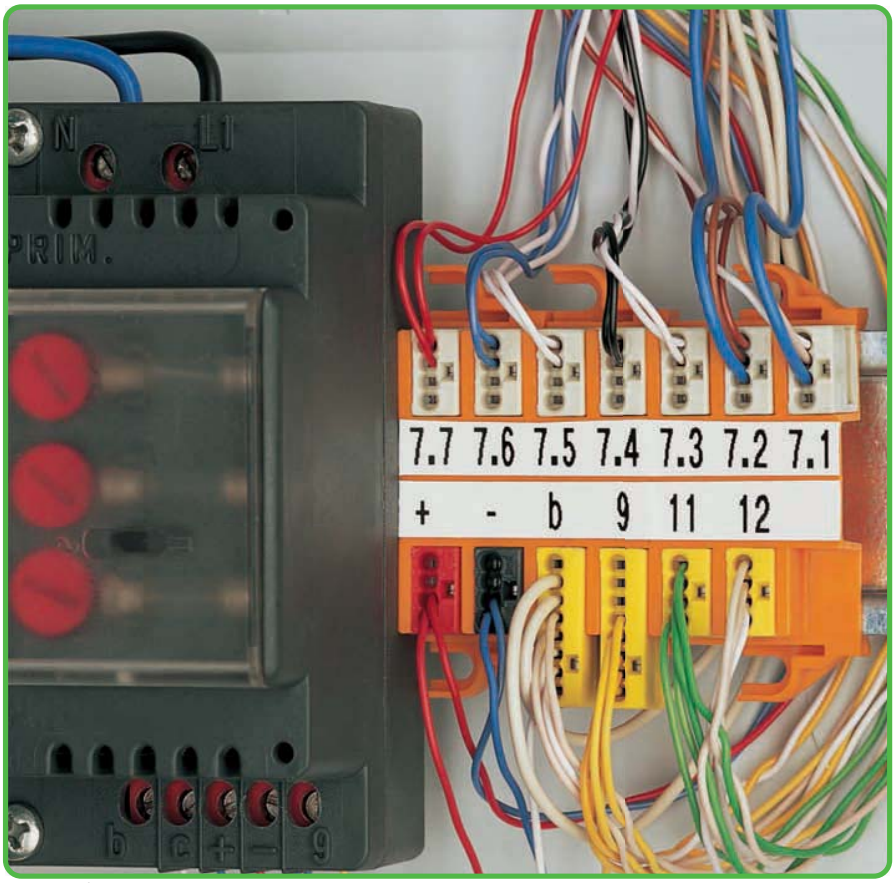
Inserting a MICRO PUSH WIRE® connector for junction boxes into the carrier.



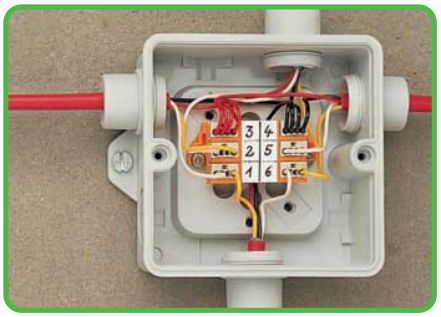
Removing a MICRO PUSH WIRE® connector from the carrier.



Example of residential door bell application – mounted on DIN 35 rail



Example of residential (home) communication application



Typical application in a terminal box for burglar alarm – screw mount

Quick fix mounting

Realizing MICRO PUSH WIRE® connectors are ideal for DIN-rail mount panel applications, electrical installers have requested the ability to use them in distribution panels. MICRO PUSH WIRE® connectors provide easy connections for smaller conductors used in low-current applications. They are well-suited to terminating telephone-style conductors for connecting alarms, bells, door sensors, communication systems, etc.

The mounting carrier WAGO´s Professional Solution. It is available with mounting slots for 4 or 6 connectors.

Depending on the number of conductors, each mounting slot can accommodate a 4- or 8-conductor MICRO connector. The connectors simply snap into the mounting slots and are removable, allowing conductors to be exchanged during changeover.

The carrier is designed for easy mounting directly to the DIN 35 rail, or to a panel, via the screw-mount flanges provided. A large marking surface is provided for clear circuit identification. This may be directly marked with a felt-tip pen, or via pre-printed self-adhesive marker strips.

MICRO PUSH WIRE® Connectors for Junction Boxes Ø 0.8 mm
243 Series

PUSH WIRE®

0.6 - 0.8 mm Ø "s" ❶	AWG 22 - 20 "s"
100 V/1.5 kV/2 ❷	150 V, 7 A
I_N 6 A	150 V, 7 A
5 - 6 mm / 0.22 in ❸	

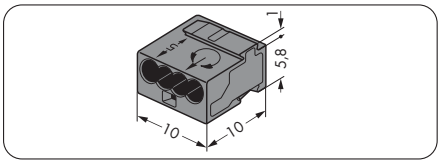
0.6 - 0.8 mm Ø "s" ❶	AWG 22 - 20 "s"
100 V/1.5 kV/2 ❷	150 V, 7 A
I_N 6 A	150 V, 7 A
5 - 6 mm / 0.22 in ❸	

❶ When using conductors with the same diameter, 0.5 mm/AWG 24 or 1 mm/AWG 18 diameters are also possible.

❷ 100 V = rated voltage
1.5 kV = rated surge voltage
2 = pollution degree
(also see Section 14)

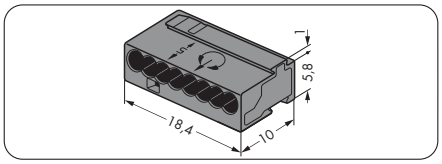
❸ Strip length, see packaging or instructions.

Color	Item No.	Pack. Unit
MICRO PUSH WIRE® connector for junction boxes,		
4-conductor connector		
dark gray	**243-204**	1000 (10x100)
red	**243-804**	1000 (10x100)



Dimensions in mm

Color	Item No.	Pack. Unit
MICRO PUSH WIRE® connector for junction boxes,		
8-conductor connector		
dark gray	**243-208**	500 (10x50)
red	**243-808**	500 (10x50)



Dimensions in mm

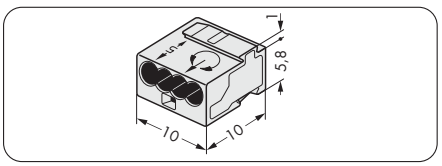
The 243 Series of WAGO PUSH WIRE® connectors can be used in both communication and alarm systems according to the VdS (German Association of Property Insurers) guidelines.

No general approval is given to push-wire connectors by the VdS association. The connectors must be tested together with the different parts of the system.

The requirements for connectors are specified in the VdS guidelines for junction boxes (VdS 2116) in section 8.7: "The junction box connectors must be designed to guarantee a reliable and stable connection".

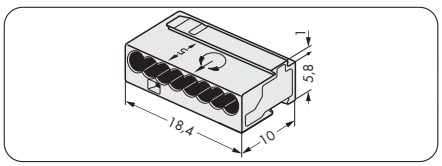
The verification of the fulfillment of these requirements is documented in the VDE test report No. 2574-1440-4031 for the 243 Series of insulated PUSH WIRE® connectors.

Color	Item No.	Pack. Unit
MICRO PUSH WIRE® connector for junction boxes,		
4-conductor connector		
light gray	**243-304**	1000 (10x100)
yellow	**243-504**	1000 (10x100)



Dimensions in mm

Color	Item No.	Pack. Unit
MICRO PUSH WIRE® connector for junction boxes,		
8-conductor connector		
light gray	**243-308**	500 (10x50)
yellow	**243-508**	500 (10x50)

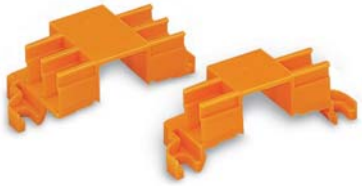


Dimensions in mm

For list of approvals and user guide, see pages 634 to 637.

MICRO PUSH WIRE® Connectors for Junction Boxes Ø 0.5 mm and Mounting Carriers for DIN 35 Rail or Screw Mount 243 Series

0.4 - 0.5 mm Ø "s" | AWG 26 - 24 "s" 100 V/1.5 kV/2 ❶ I_N 6 A 5 - 6 mm / 0.22 in ❷	Mounting carrier



❶ 100 V = rated voltage
1.5 kV = rated surge voltage
2 = pollution degree
(also see Section 14)

❷ Strip length, see packaging or instructions.

Color	Item No.	Pack. Unit
MICRO PUSH WIRE® connector for junction boxes,		
4-conductor connector		
transparent	**243-144**	1000 (10x100)

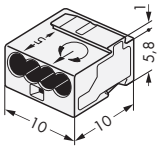
Color	Item No.	Pack. Unit
Mounting carrier,		
for 4 MICRO PUSH WIRE® connectors		
orange	**243-112**	50 (5x10)
Mounting carrier,		
for 6 MICRO PUSH WIRE® connectors		
orange	**243-113**	50 (5x10)

Item-Specific Accessories

Self-adhesive marking strips, plain,

Height of marking strip: 7 mm, 6 self-adhesive strips per card

white	**243-110**	1



Dimensions in mm

Quick fix mounting

Realizing MICRO PUSH WIRE® connectors are ideal for DIN-rail mount panel applications, electrical installers have requested the ability to use them in distribution panels. MICRO PUSH WIRE® connectors provide easy connections for smaller conductors used in low-current applications. They are well-suited to terminating telephone-style conductors for connecting alarms, bells, door sensors, communication systems, etc.

The mounting carrier WAGO´s Professional Solution. It is available with mounting slots for 4 or 6 connectors.

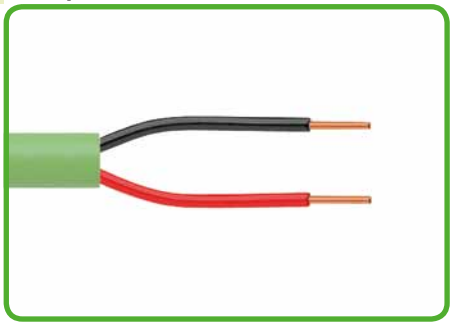
Depending on the number of conductors, each mounting slot can accommodate a 4- or 8-conductor MICRO connector. The connectors simply snap into the mounting slots and are removable, allowing conductors to be exchanged during changeover.

The carrier is designed for easy mounting directly to the DIN 35 rail, or to a panel, via the screw-mount flanges provided. A large marking surface is provided for clear circuit identification. This may be directly marked with a felt-tip pen, or via pre-printed self-adhesive marker strips.

For list of approvals and user guide, see pages 634 to 637.

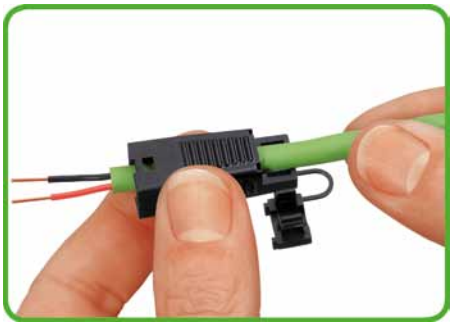
Handling *WINSTA*® KNX, 893 Series

Preparation

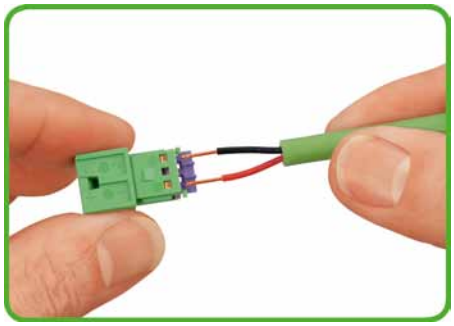


1. Strip length, outer insulation: = 23 mm
2. Strip length = 9 mm

Conductor termination

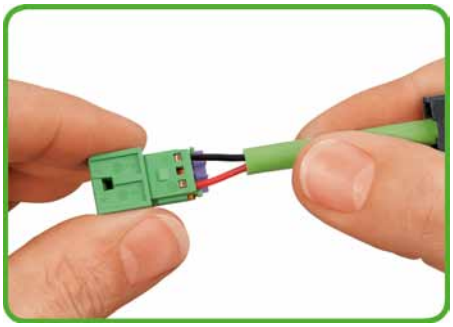


Prior to termination, pull the strain relief housing over the cable.

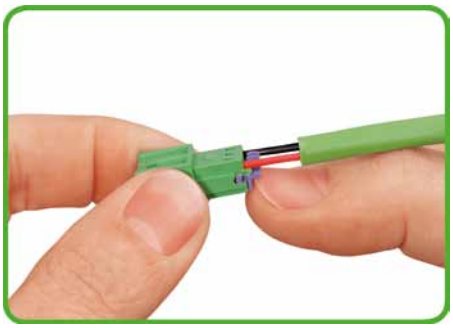


Insert stripped conductor directly into the conductor entry .

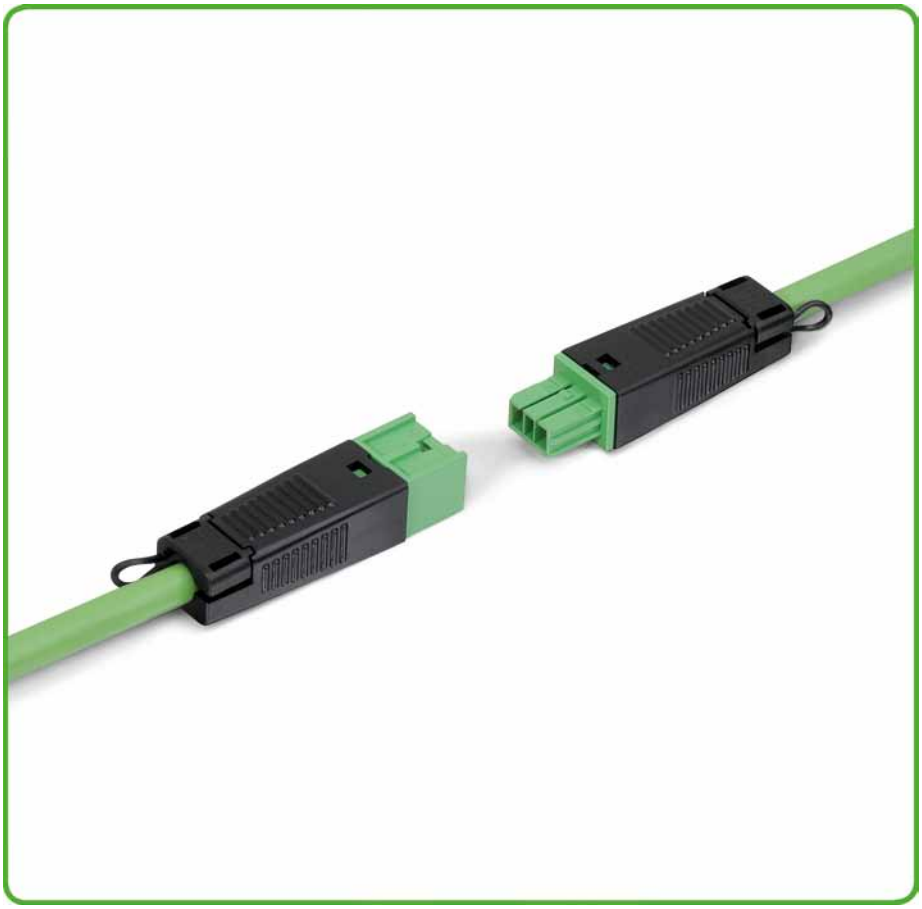
Conductor termination



Push conductors until they hit backstop.



To disconnect, open clamping unit via purple actuator and pull out conductor.



Strain relief assembly

Snap wired connector into strain relief housing.

Press strain relief firmly on the cable.

Pre-assembled KNX connector.

WINSTA® KNX

Sockets and Plugs, 2-Pole

	0.8 mm Ø 50 V/0.8 kV/3 I_N 3 A 9 mm / 0.35 in ❶ Approvals	0.8 mm Ø 50 V/0.8 kV/3 I_N 3 A 9 mm / 0.35 in ❶ Approvals

Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Pluggable connectors, 2-pole, with spring clamp connection	**Socket with strain relief housing,** 5 – 7 mm cable diameter ❷			**Plug with strain relief housing,** 5 – 7 mm cable diameter ❷		
	green	**893-1002**	50	green	**893-1012**	50
	Special coding:			Special coding:		
	light gray	**893-1022**	50	light gray	**893-1032**	50

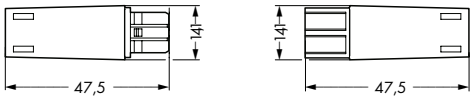
Info	Dimensions

❶ For "International Certification Organizations" and "Approvals – User Guide," see pages 240 to 243.

❷ 2Y(ST)2x(2x0.8)

green Coding E (1+ 2–)
light gray Coding F (1+ 2–)

For coding information, see pages 224 to 226.
Fire load data available upon request.

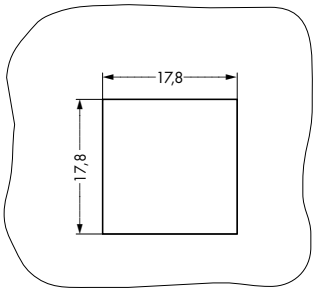


WINSTA® KNX

Snap-In Sockets and Plugs, 2-Pole

PUSH WIRE®

Cutout dimensions Plate thickness: 0.5 – 2 mm Cutout tolerance: + 0.1 mm	**0.8 mm Ø** **50 V/0.8 kV/3** **I_N 3 A** **9 mm / 0.35 in** **❶ Approvals**	**0.8 mm Ø** **50 V/0.8 kV/3** **I_N 3 A** **9 mm / 0.35 in** **❶ Approvals**



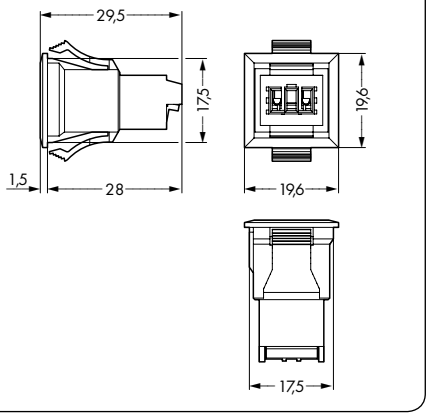
Description	Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Snap-in connectors, 2-pole,	**Socket,**			**Plug,**		
with spring clamp connection,	for KNX applications			for KNX applications		
T-distribution connectors						
	green	**893-2002**	50	green	**893-2012**	50
	Special coding:			Special coding:		
	light gray	**893-2022**	50	light gray	**893-2032**	50

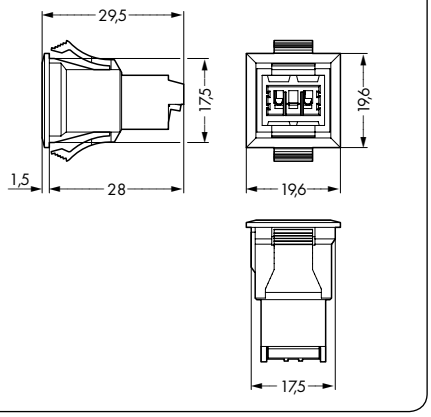
Info	Dimensions

❶ For "International Certification Organizations" and "Approvals – User Guide," see pages 240 to 243.

green Coding E (1+ 2–)
light gray Coding F (1+ 2–)

For coding information, see pages 224 to 226.
Fire load data available upon request.





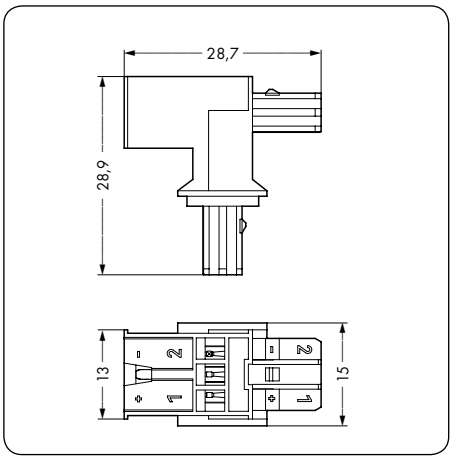
T-Distribution Connectors, 2-Pole

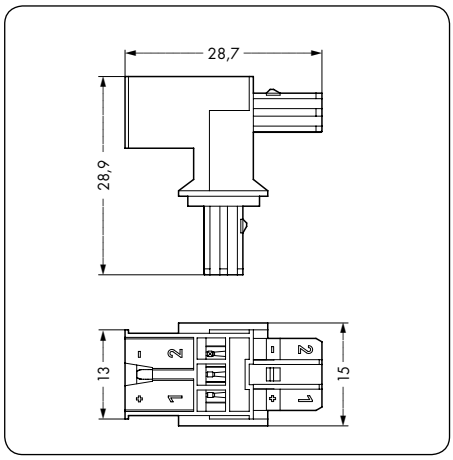
50 V/0.8 kV/3 I_N 3 A ❶ Approvals	50 V/0.8 kV/3 I_N 3 A ❶ Approvals

Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
T-distribution connector, 1 x plug / 2 x socket, for KNX applications			**T-distribution connector,** 1 x plug / 2 x socket, with special coding		
green	**893-1606**	25	light gray	**893-1656**	25

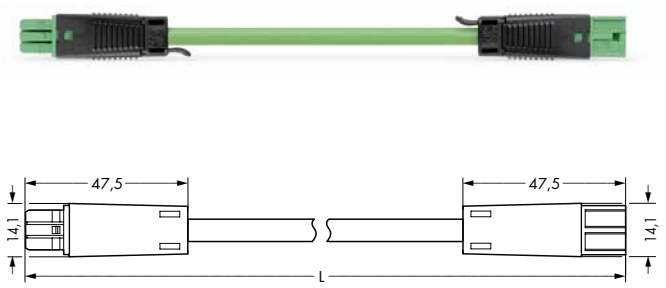
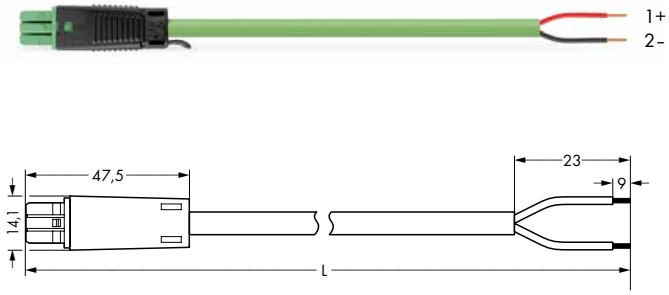
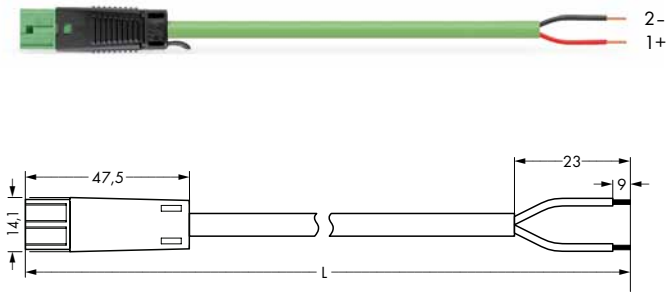
"Flying leads" using a T-distribution connector

Dimensions





WINSTA® KNX Cable Assemblies, 2 x 0.8 mm Ø

	PVC UNITRONIC BUS EIB 2x2x0.8 50 V/0.8 kV/3 I_N 3 A ❶ Approvals
Interconnecting cable, socket – plug	**Length Item No.**
	**Coding E,** for KNX applications **PVC** 1 m **894-8992/033-106** 3 m **894-8992/033-306** 5 m **894-8992/033-506**
Connecting cable, socket – free end	**Length Item No.**
	**Coding E,** for KNX applications **PVC** 1 m **894-8992/133-106** 3 m **894-8992/133-306** 5 m **894-8992/133-506**
Connecting cable, plug – free end	**Length Item No.**
	**Coding E,** for KNX applications **PVC** 1 m **894-8992/233-106** 3 m **894-8992/233-306** 5 m **894-8992/233-506**
Info	

❶ For "International Certification Organizations" and "Approvals – User Guide," see pages 240 to 243.

For halogen-free cables, please contact factory.

❷ Cable core assignment, coding F:
yellow 1+
white 2–

● green Coding E (1+ 2–)
○ light gray Coding F (1+ 2–)

For coding information, see pages 224 to 226.
Fire load data available upon request.

WINSTA® IDC for Flat Cables up to 16 mm²

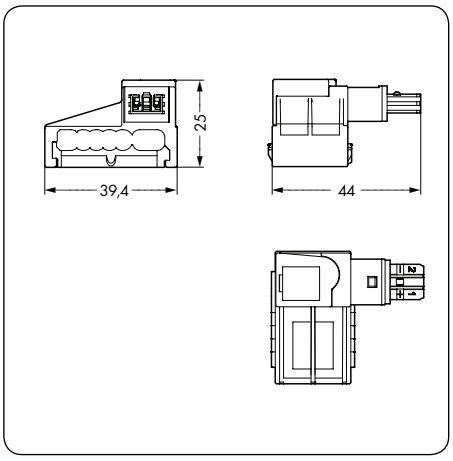
Note:
- Installation connectors are designed for connection and disconnection while not under load.
- There is no hazard-inducing interchangeability with systems based on IEC 60309, IEC 60320, IEC 60906 and with national connector and socket systems.
- Compliance with the standards (IEC 61535) does not guarantee hazard-avoiding, non-interchangeability with installation connector systems from various manufacturers.
- Installation connector systems are not a substitute for residential connector/socket systems.
- WINSTA® IDC connectors are not intended for installation in open or easily accessible areas.

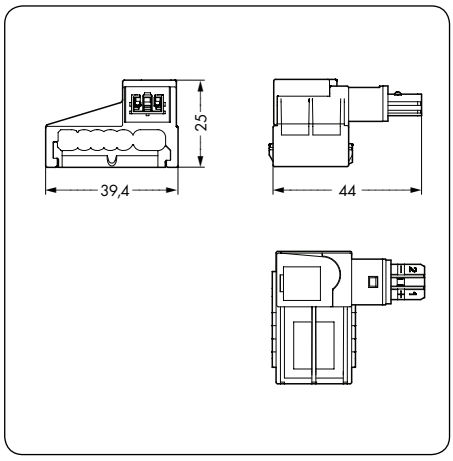
893 Series
Tap-Off Modules, 2-Pole, for 7-Core Flat Cable

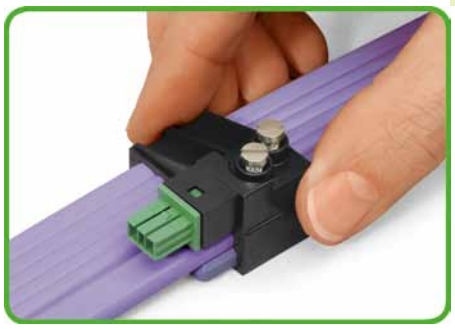
50 V/0.8 kV/3 I_N 3 A ❶ Approvals	50 V/0.8 kV/3 I_N 3 A ❶ Approvals

Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Tap-off module, 2-pole, for connectors and cable assemblies, coding E, KNX, 1 Nm tightening torque			**Tap-off module,** 2-pole, for connectors and cable assemblies, coding F, 1 Nm tightening torque		
● green	**893-262**	25	○ light gray	**893-269**	25
For flat cables,			**For flat cables,**		
see page 204			see page 204		

Dimensions



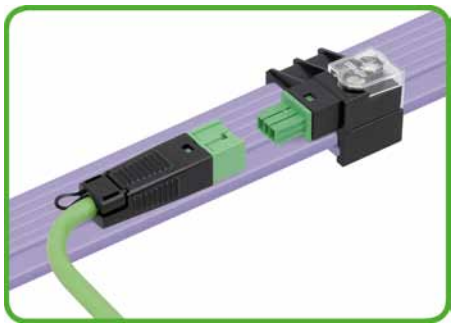




The IDC module can only be mounted if the two codings correspond to each other.
Should the IDC module jam during mounting, turn the module by 180° and remount it, flush with the base.

Contact is made with the flat cable by tightening the screws.
Observe 1 Nm of tightening torque!

Snapping on transparent protective cover.



Connecting a cable assembly.

WINSTA® IDC

893 Series
Supply Module, 2-Pole, for 2-Core Flat Cable

	4 x 0.6 – 0.8 mm Ø "sol." **50 V/0.8 kV/3** **I_N 3 A** **5 – 6 mm / 0.22 in** **❶ Approvals**

The IDC module can only be mounted if the two codings correspond to each other.
Should the IDC module jam during mounting, turn the module by 180° and remount it, flush with the base.

Description	Color	Item No.	Pack. Unit
Supply module, 2-pole,	**Supply module,**		
with 243 Series PUSH WIRE® connectors	1 Nm tightening torque		
Tap-off modules, 2-pole,			
with screw connection	black	**893-121**	25
	For flat cables,		
	see page 208		

Contact is made with the flat cable by tightening the screws.
Observe 1 Nm of tightening torque!

Snapping on transparent protective cover.

Info

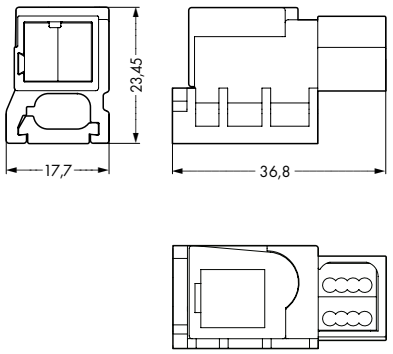
❶ For "International Certification Organizations" and "Approvals – User Guide," see pages 240 to 243.

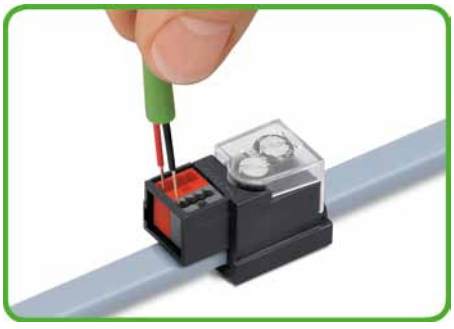
Processing temperature: +5 °C to +40 °C

- green Coding E (1+ 2–)
- light gray Coding F (1+ 2–)

For coding information, see pages 228 to 231.
Fire load data available upon request.

Dimensions





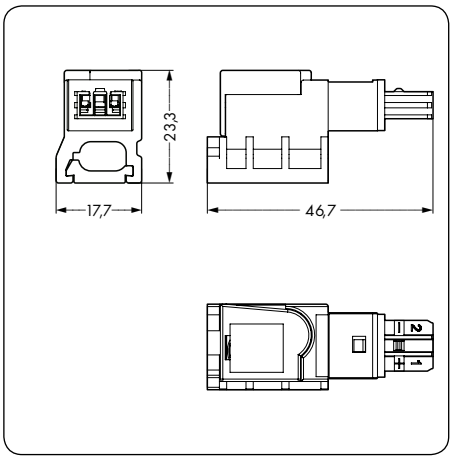
Terminating solid conductors: Simply push in stripped conductor until it hits backstop.

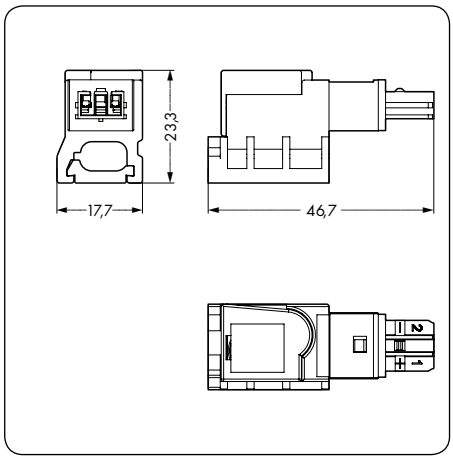
893 Series
Tap-Off Modules, 2-Pole, for 2-Core Flat Cable

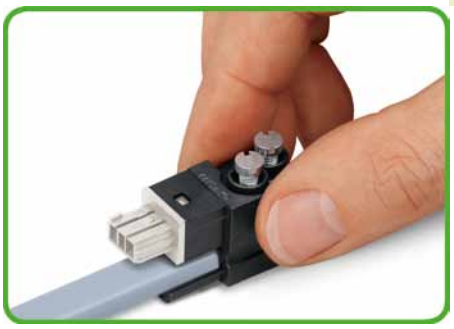
50 V/0.8 kV/3 I_N 3 A ❶ Approvals	50 V/0.8 kV/3 I_N 3 A ❶ Approvals

Color	Item No.	Pack. Unit	Color	Item No.	Pack. Unit
Tap-off module, 2-pole, for connectors and cable assemblies, KNX, 1 Nm tightening torque			**Tap-off module,** 2-pole, for connectors and cable assemblies, 1 Nm tightening torque		
● green	**893-122**	50	○ light gray	**893-129**	50
For flat cables, see page 208			**For flat cables,** see page 208		

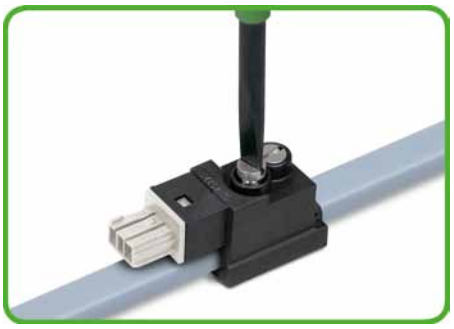
Dimensions



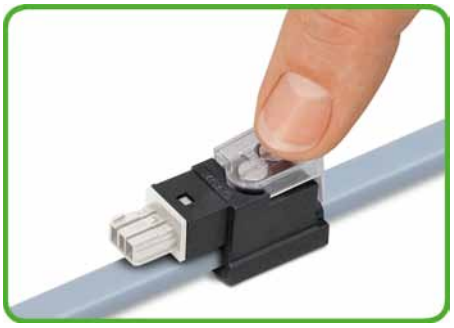




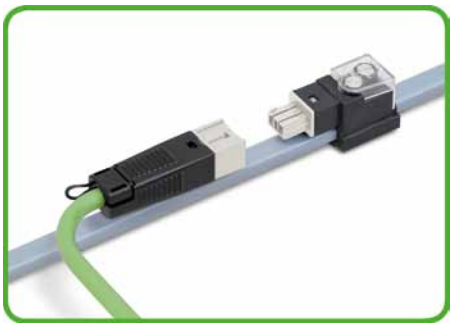
The IDC module can only be mounted if the two codings correspond to each other.
Should the IDC module jam during mounting, turn the module by 180° and remount it, flush with the base.



Contact is made with the flat cable by tightening the screws.
Observe 1 Nm of tightening torque!



Snapping on transparent protective cover.



Connecting a cable assembly.