



221 Series LEVER-NUTS® The Way to Connect!



221 Series LEVER-NUTS®

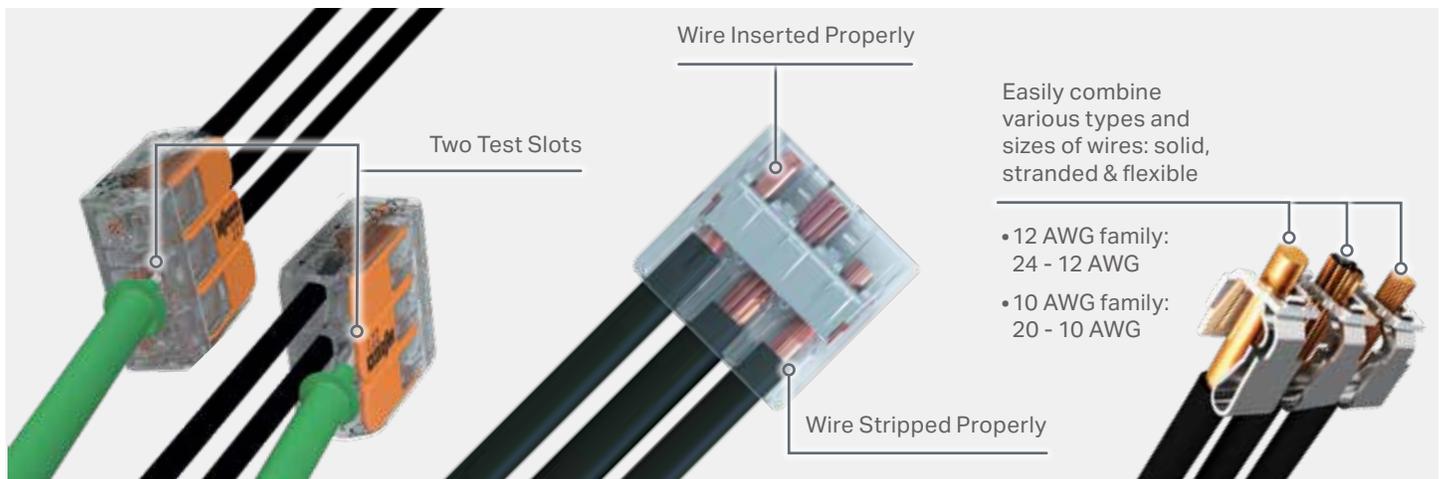
Compact Splicing Connectors for All Wire Types



| Electrical Data | | |
|-------------------------------|---------------------------------|------------------|
| Rated voltage | 600 V (1000 V signs & fixtures) | |
| Nominal current | 20 A | 30 A |
| Wire Size | | |
| Solid conductor | 24 - 12 AWG | 20 - 10 AWG |
| Stranded conductor | 24 - 12 AWG | 20 - 10 AWG |
| Flexible conductor | 24 - 12 AWG | 20 - 10 AWG |
| Strip length | 11 mm / 0.43 in. | 13 mm / 0.51 in. |
| Maximum operating temperature | 105 °C | |

Setting new standards in electrical installation, the 221 Series *LEVER-NUTS*® splicing connector is now smaller, more user-friendly and made for larger conductors.

- Connect any combination of solid, stranded and flexible copper wires faster and more reliably
- Visually inspect for proper strip length and complete wire insertion through its transparent housing
- Operate comfortably with lower operating forces by using familiar orange levers

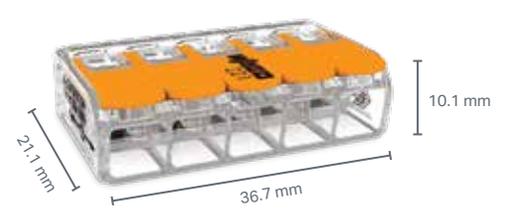


221 Series for 12 AWG



| 2-conductor connector, with levers | | 3-conductor connector, with levers | | 5-conductor connector, with levers | |
|------------------------------------|------------------|------------------------------------|------------------|------------------------------------|------------------|
| Item Number | Units | Item Number | Units | Item Number | Units |
| 221-412 | 1=box of 100 | 221-413 | 1=box of 50 | 221-415 | 1=box of 25 |
| 221-412/VE00-2500 | 2500 (bulk) | 221-413/VE00-2500 | 2500 (bulk) | 221-415/VE00-1000 | 2500 (bulk) |
| 221-412/996-010 | 1=10 (clamshell) | 221-413/996-010 | 1=10 (clamshell) | 221-415/996-010 | 1=10 (clamshell) |
| 221-412/K194-4045/000-100 | 1=jug of 550 | 221-413/K194-4045/000-100 | 1=jug of 350 | 221-415/K194-4045/000-100 | 1=jug of 225 |

221 Series for 10 AWG



| 2-conductor connector, with levers | | 3-conductor connector, with levers | | 5-conductor connector, with levers | |
|------------------------------------|-------------|------------------------------------|-------------|------------------------------------|-------------|
| Item Number | Units | Item Number | Units | Item Number | Units |
| 221-612 | 1=box of 50 | 221-613 | 1=box of 30 | 221-615 | 1=box of 15 |
| 221-612/VE00-1000 | 1000 (bulk) | 221-613/VE00-1000 | 1000 (bulk) | 221-615/VE00-500 | 500 (bulk) |

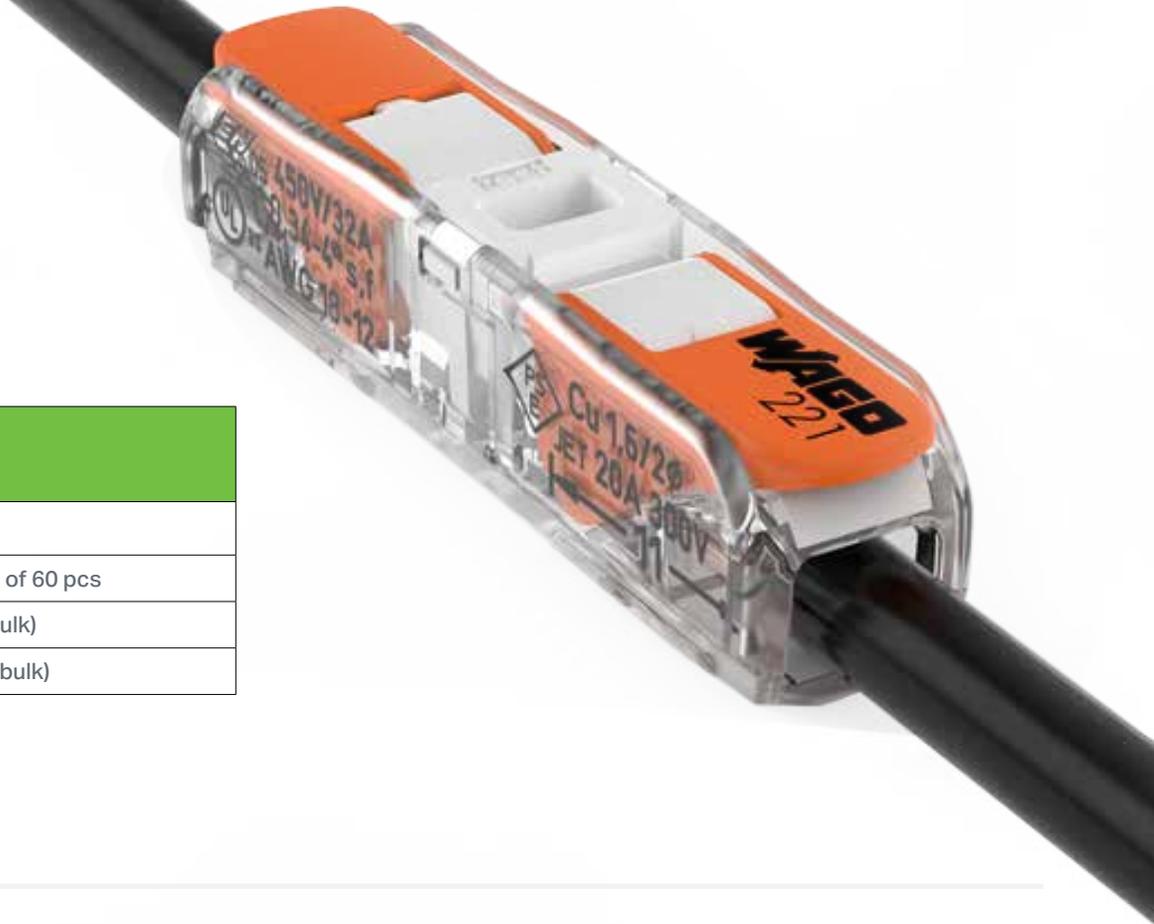
221 Series Lever-Nuts® Inline

Compact Splicing Connectors for All Wire Types

| Electrical Data | |
|-------------------------------|---------------------------------|
| Item Number | 221-2401 |
| Rated voltage | 600 V (1000 V signs & fixtures) |
| Nominal current | 20 A |
| Wire Size | |
| Solid conductor | 20 - 12 AWG |
| Stranded conductor | 18 - 12 AWG |
| Flexible conductor | 18 - 12 AWG |
| Strip length | 11 mm / 0.43 in. |
| Maximum operating temperature | 105 °C |

- Connects solid, stranded and fine-stranded conductors from 20-12 AWG in the feedthrough direction
- Slim design minimizes dimensions for installation in tight spaces
- Ease of use - lift the lever up, insert a conductor and push the lever back down
- Tool-free connection and disconnection thanks to the convenient lever technology

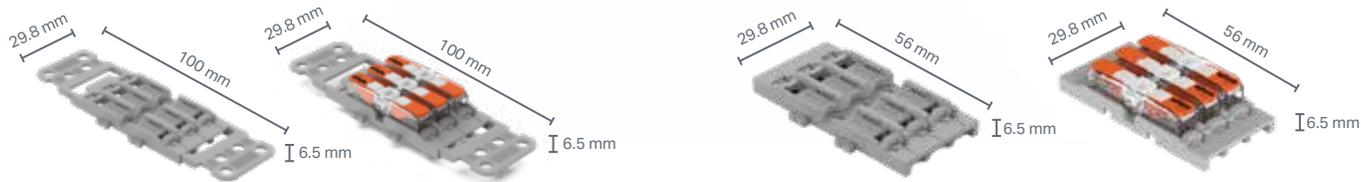




2-conductor connector
Transparent housing, levers

| Item Number | Units |
|--------------------|-----------------|
| 221-2401/K000-0002 | 1=box of 60 pcs |
| 221-2401 | 500 (bulk) |
| 221-2401 | 2500 (bulk) |

Accessories



| Mounting Carrier with Strain Relief | | | | Mounting Carrier without Strain Relief | | | |
|-------------------------------------|-------|-------------------|-------|--|-------|------------------|-------|
| For Screw Mount | | With Snap-In Foot | | For Screw Mount | | For Snap-In Foot | |
| | | | | | | | |
| 221-2501 | 1-way | 221-2511 | 1-way | 221-2521 | 1-way | 221-2531 | 1-way |
| 221-2502 | 2-way | 221-2512 | 2-way | 221-2522 | 2-way | 221-2532 | 2-way |
| 221-2503 | 3-way | 221-2513 | 3-way | 221-2523 | 3-way | 221-2533 | 3-way |
| 221-2504 | 4-way | 221-2514 | 4-way | 221-2524 | 4-way | 221-2534 | 4-way |
| 221-2505 | 5-way | 221-2515 | 5-way | 221-2525 | 5-way | 221-2535 | 5-way |

| Item Number | Designation | Compatibility | Application | Width |
|-------------|--------------------------|-----------------------------|--|--------|
| 209-120 | Mounting foot | for DIN-35 rail | Snap on carrier with snap-in mounting foot | 6.4 mm |
| 209-123 | Mounting foot with screw | for DIN-35 rail | Screw on carrier with mounting flange | 6.4 mm |
| 209-119 | Mounting screw | for mounting foot (209-120) | | |
| 209-1115 | Mounting foot | for DIN-15 rail | Snap on carrier with snap-in mounting foot | 6.4 mm |
| 209-1116 | Mounting foot with screw | for DIN-15 rail | Screw on carrier with mounting flange | 6.4 mm |

221 Series Lever-Nuts®

For Hazardous Locations

| Electrical Data | | |
|-------------------------------|---|------------------|
| Rated Voltage | 440 V with spacing between adjacent connectors; 275 V without spacing; 600 V for general industry | |
| Nominal Current | 20 A | 30 A |
| Wire Size | | |
| Solid conductor | 24 - 12 AWG | 20-10 AWG |
| Stranded conductor | 24 - 12 AWG | 20-10 AWG |
| Flexible conductor | 24 - 12 AWG | 20-10 AWG |
| Strip Length | 11 mm / 0.43 in. | 13 mm / 0.51 in. |
| Maximum Operating Temperature | 105 °C | |

- Easy, fast and reliable connection technology for products in hazardous areas
- Must be used with mounting carrier to fulfill Ex requirements
- Mounting carrier can be DIN rail mounted or can be screwed down to a smooth surface
- Excellent for junction boxes in haz-loc applications

4

Zone 1, 2

IECEx

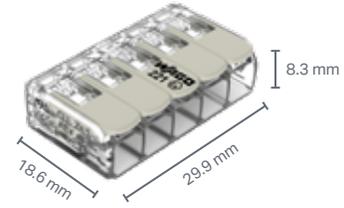
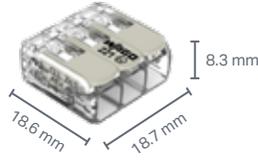
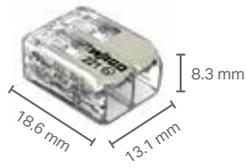
Class 1, Zone 1

AEx

Class 1, Zone 1

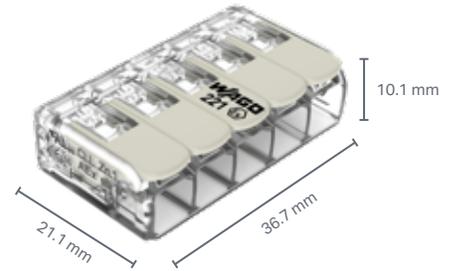
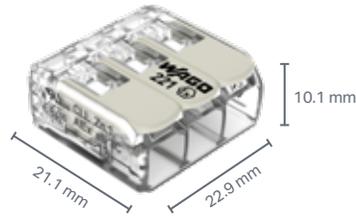
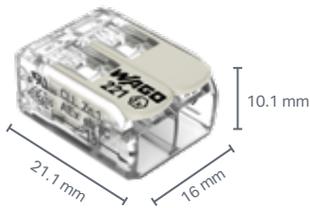


221 Series Ex for 12 AWG



| 2-conductor connector Transparent housing, levers | | 3-conductor connector Transparent housing, levers | | 5-conductor connector Transparent housing, levers | |
|--|------------------|--|-----------------|--|-----------------|
| Item Number | Units | Item Number | Units | Item Number | Units |
| 221-482 | 1=box of 100 pcs | 221-483 | 1=box of 50 pcs | 221-485 | 1=box of 25 pcs |

221 Series Ex for 10 AWG



| 2-conductor connector Transparent housing, levers | | 3-conductor connector Transparent housing, levers | | 5-conductor connector Transparent housing, levers | |
|--|-----------------|--|-----------------|--|-----------------|
| Item Number | Units | Item Number | Units | Item Number | Units |
| 221-682 | 1=box of 50 pcs | 221-683 | 1=box of 30 pcs | 221-685 | 1=box of 15 pcs |

Easy Operation



Easily open lever by hand and insert conductor



Push lever back down



Install connectors into the mounting carrier



Remove connectors without tools



Secure the carrier using screws on smooth surfaces



Test inserted connectors in the carrier



Rated 440 V with spacing between adjacent connectors



Rated 275 V with no spacing between connectors

Accessories for 221 Series Lever-Nuts®

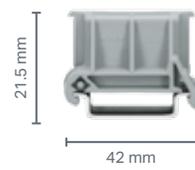
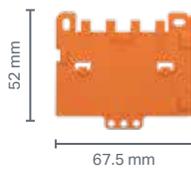
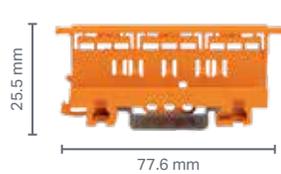
| Operating Tool | |
|-------------------------------|-------|
| For opening 221 series levers | |
| Item Number | Units |
| 210-102 (12 AWG) | 1 |
| 210-104 (10 AWG) | 1 |



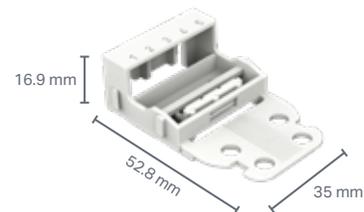
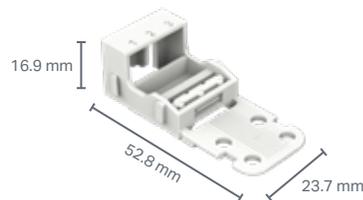
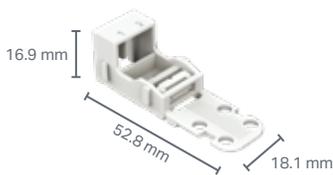
Expand installation flexibility by coupling the easy-to-use 221 Series LEVER-NUTS® with these mounting accessories. The mounting carrier converts the compact splicing connector into a DIN rail or chassis mount terminal block solution.

- Mounting flexibility: horizontal or vertical, snap to DIN rail or screw mount to flat panel
- Open face design: allows access for wiring and testing even after the connector is mounted into the carrier
- Easy wire management: multiple cable tie locations; two marking surfaces; built-in spacing fingers for visual separation of potentials

12 AWG Family Accessories

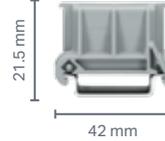
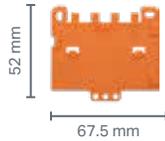
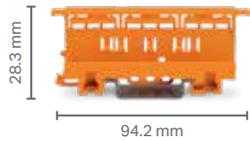


| Mounting carrier | | Strain relief plate | | Angled DIN rail adapter | |
|---|-------------|---|-------------|---|-------------|
| For 2-, 3- and 5-conductor compact splicing connectors (DIN rail & panel mount) | | For snap-on fixing to 221-500 or 221-510 mounting carrier | | In combination with 221-500 or 221-510 mounting carrier for DIN rail mounting | |
| Item Number | Units | Item Number | Units | Item Number | Units |
| 221-500 | 1=box of 10 | 222-505 | 1=box of 10 | 222-510 | 1=box of 10 |
| 221-501 (EX) | 1=box of 10 | | | | |



| Mounting carrier | | Mounting carrier | | Mounting carrier | |
|--|-------------|--|-------------|--|-------------|
| For single 2-conductor connector (panel mount) | | For single 3-conductor connector (panel mount) | | For single 5-conductor connector (panel mount) | |
| Item Number | Units | Item Number | Units | Item Number | Units |
| 221-502 | 1=box of 10 | 221-503 | 1=box of 10 | 221-505 | 1=box of 10 |

10 AWG Family Accessories



| Mounting carrier | | Strain relief plate | | Angled DIN rail adapter | |
|--|-------------|---|-------------|---|-------------|
| For 2-, 3- and 5-conductor 10 AWG splicing connectors (DIN rail & panel mount) | | For snap-on fixing to 221-500 or 221-510 mounting carrier | | In combination with 221-500 or 221-510 mounting carrier for DIN rail mounting | |
| Item Number | Units | Item Number | Units | Item Number | Units |
| 221-510 | 1=box of 10 | 222-505 | 1=box of 10 | 222-510 | 1=box of 10 |
| 221-511 (EX) | 1=bag of 10 | | | | |

Handling



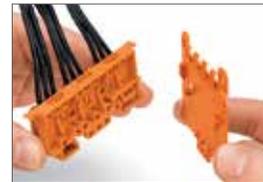
Insert connectors into the mounting carrier



Access to levers when mounted; wiring possible before and/or after inserting connectors into the carrier



Removing connector from the mounting carrier



Mounting of strain relief plate (222-505) to the mounting carrier



Snapping the angled DIN rail adapter on the mounting carrier



Testing connectors via their front test slots, which remain accessible when mounted



Insert connector into the single mounting carrier



Inserting a conductor into the single mounting carrier

Mounting Options



Vertical mounting on DIN rail with wire ties providing strain relief



Vertical mounting with strain relief plate on DIN rail; wiring locations identified by marker strips



Horizontal mounting on DIN rail using angled DIN rail adapter



Horizontal mounting with strain relief plate on DIN rail using angled DIN rail adapter



Mounting carrier with strain relief plate mounted vertically on a flat panel



Horizontal mounting with strain relief plate on flat panel; wiring locations identified using marker strips



Horizontal or vertical screw mounting



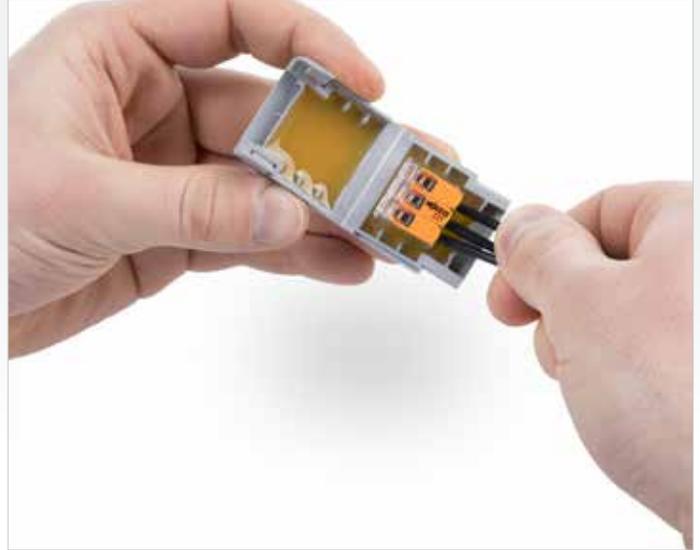
Example: connecting a light using two single mounting carriers

WAGO Gelbox for Splicing Connectors

Handling & Combinations



Open the Gelbox at the side latches



Place the wired connector in the Gelbox



Close the Gelbox



Open the Gelbox, remove gel from the connector, open the connector & connect new components to the cable

| Item Number | 221-412 | 221-413 | 221-415 | 221-612 | 221-613 | 221-615 | 221-2401 |
|-------------|---|---|---|---|---|---|---|
| 207-1331 | 1 x  | 1 x  | - | | | | |
| 207-1332 | 2 x  | - | 1 x  | | | | |
| 207-1333 | 3 x  | 2 x  | - | | | | |
| 207-1431 | | | | 1 x  | 1 x  | - | |
| 207-1432 | | | | 2 x  | - | 1 x  | |
| 207-1433 | | | | 3 x  | 2 x  | - | |
| 207-1372 | | | | | | | 2 x  |
| 207-1373 | | | | | | | 3 x  |
| 207-1375 | | | | | | | 5 x  |

Note: With other combinations, IPX8 protection cannot be guaranteed.

| Item Number | Description |
|---|---|
|  207-1331 | Gelbox, IPX8, 221 and 2773 Series, size 1 |
|  207-1332 | Gelbox, IPX8, 221 and 2773 Series, size 2 |
|  207-1333 | Gelbox, IPX8, 221 and 2773 Series, size 3 |
|  207-1431 | Gelbox, IPX8, 221 Series, size 1 |
|  207-1432 | Gelbox, IPX8, 221 Series, size 2 |
|  207-1433 | Gelbox, IPX8, 221 Series Inline, size 3 |
|  207-1372 | Gelbox, IPX8, 221 Series Inline, size 1 |
|  207-1373 | Gelbox, IPX8, 221 Series Inline, size 2 |
|  207-1375 | Gelbox, IPX8, 221 Series Inline, size 3 |

Simple Application

- Voltage range: see connector voltage
- Rated current: see connector current
- Rated surge voltage: 2.5 kV
- Insulation resistance: 5 MΩ
- Continuous operating temperature: 105 °C
- Ambient temperature: 85 °C
- Physical properties: IPX8
- Suitable for indefinite storage

WAGO Corporation
N120 W19129 Freistadt Road
Germantown, Wisconsin 53022
Telephone: 800 / DIN-Rail (346-7245)
Fax: 262 / 255-3232
info.us@wago.com
www.wago.us

WAGO Canada Inc.
1550 Yorkton Court, Unit 1
Burlington, ON
L7P 5B7
Telephone: 888 / WAGO 221 (924-6221)
info.ca@wago.com
www.wago.ca

WAGO SA DE CV
Carretera estatal 431 Km. 2+200. Lote 99 6
Parque Industrial Tecnológico Innovación Querétaro
El Marques, Qro. 76246
Lada sin Costo: 01 800 288 WAGO (288-9246)
Telefono: 422 / 221-5946
info.mx@wago.com
www.wago.mx

WAGO is a registered trademark of WAGO Verwaltungsgesellschaft mbH.

"Copyright – WAGO Kontakttechnik GmbH & Co. KG – all rights reserved. The content and structure of the WAGO Websites, catalogs, videos, and other WAGO media are subject to copyright. The dissemination or changing of the content of these pages and videos is not permitted. Furthermore, the content may neither be copied nor made available to third parties for commercial purposes. Also subject to copyright are the images and videos that were made available to WAGO Kontakttechnik GmbH & Co. KG by third parties."