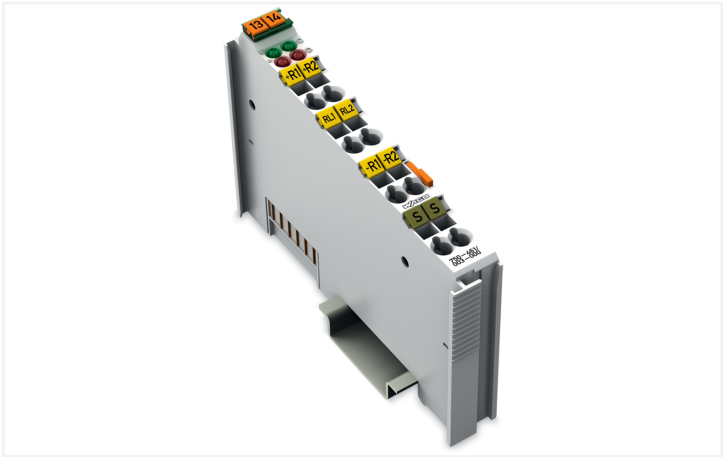
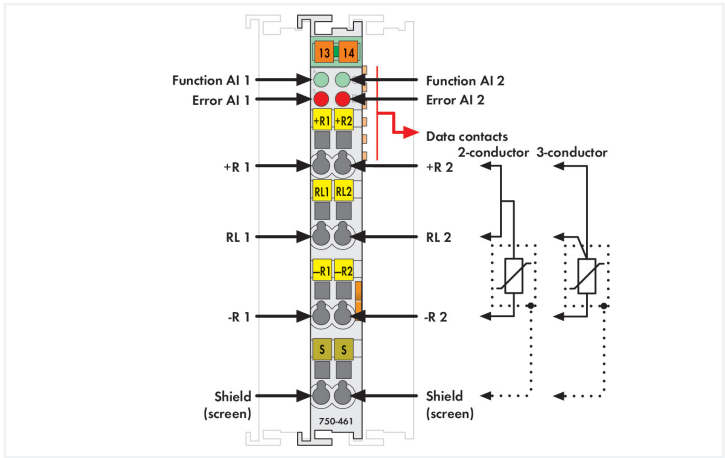
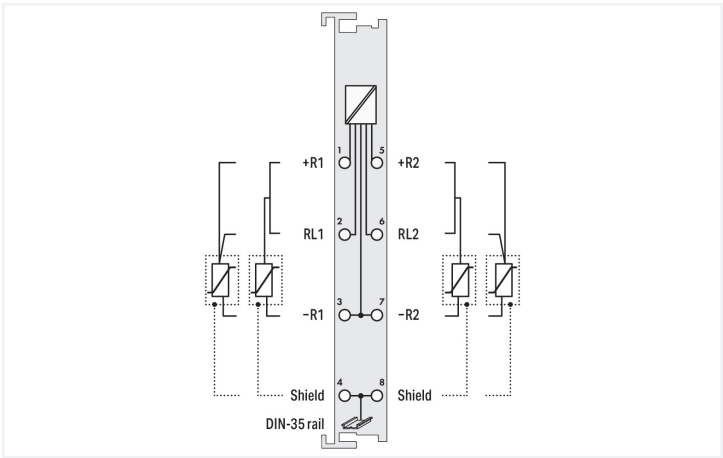
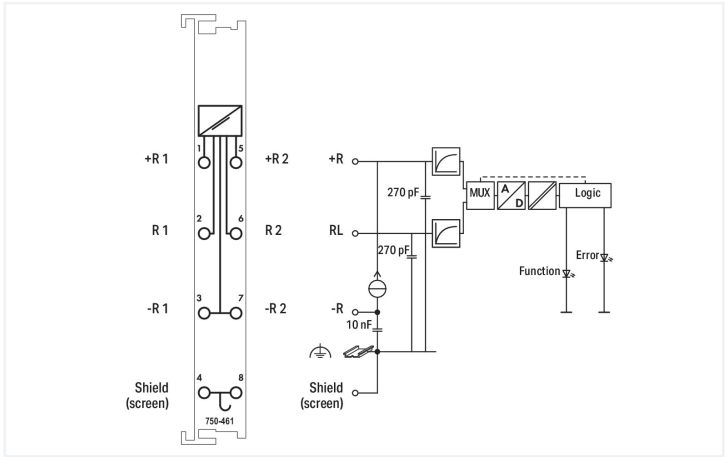




Color: ■ light gray



This analog input module directly connects to Pt or Ni resistance sensors. Two- or three-wire sensors can be connected. The module automatically linearizes the entire temperature range. A sensor error (short circuit, line break or measurement range overflow) is indicated by a red LED. A green LED indicates readiness for operation and error-free communication with the coupler. The shield directly connects to the DIN-rail.

| Technical data                                                 |                                                      |
|----------------------------------------------------------------|------------------------------------------------------|
| Number of analog inputs                                        | 2                                                    |
| Total number of channels (module)                              | 2                                                    |
| Signal type                                                    | Resistance measurement                               |
| Signal type (configurable)                                     | Yes                                                  |
| Sensor connection                                              | 2 x (2-wire, 3-wire)                                 |
| Data width                                                     | 2 x 16-bit data; 2 x 8-bit control/status (optional) |
| Resolution (over entire range)                                 | 0.1 °C                                               |
| Conversion time (typ.)                                         | 320 ms                                               |
| Measurement error (reference temperature)                      | 25 °C                                                |
| Measurement error, deviation (max.) from the upper-range value | 0.2 %                                                |
| Temperature error (max.) of the upper-range value              | 0.01 %/K                                             |
| Measuring current (typ.)                                       | 0.5 mA                                               |
| Response time (max.)                                           | 4 s                                                  |
| Sensor types                                                   | Pt100; Configurable: Pt, Ni, Ohm                     |
| Temperature range                                              | -200 °C ... +850 °C (Pt), -60 °C ... +250 °C (Ni)    |
| Configuration options                                          | WAGO-I/O-CHECK<br>CODESYS Library<br>e!COCKPIT       |



| Technical data                          |                                                                         |
|-----------------------------------------|-------------------------------------------------------------------------|
| Supply voltage (system)                 | 5 VDC; via data contacts                                                |
| Current consumption (5 V system supply) | 80 mA                                                                   |
| Isolation                               | 500 V system/field                                                      |
| Indicators                              | LED (A, C) green: Function AI 1, AI 2; LED (B, D) red: Error AI 1, AI 2 |

| Connection data                       |                                   |
|---------------------------------------|-----------------------------------|
| Connection technology: inputs/outputs | 8 x CAGE CLAMP®                   |
| Connectable conductor materials       | Copper                            |
| Connection type 1                     | Inputs/outputs                    |
| Solid conductor                       | 0.08 ... 2.5 mm² / 28 ... 14 AWG  |
| Fine-stranded conductor               | 0.08 ... 2.5 mm² / 28 ... 14 AWG  |
| Strip length                          | 8 ... 9 mm / 0.31 ... 0.35 inches |

| Physical data                     |                        |
|-----------------------------------|------------------------|
| Width                             | 12 mm / 0.472 inches   |
| Height                            | 100 mm / 3.937 inches  |
| Depth                             | 69.8 mm / 2.748 inches |
| Depth from upper-edge of DIN-rail | 62.6 mm / 2.465 inches |

| Mechanical data |             |
|-----------------|-------------|
| Mounting type   | DIN-35 rail |

| Material data      |                              |
|--------------------|------------------------------|
| Color              | light gray                   |
| Housing material   | Polycarbonate; polyamide 6.6 |
| Fire load          | 1.034 MJ                     |
| Weight             | 65.2 g                       |
| Conformity marking | CE                           |

| Environmental requirements                                                         |                                                                                                        |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| Ambient temperature (operation)                                                    | 0 ... +55 °C                                                                                           |
| Ambient temperature (storage)                                                      | -40 ... +85 °C                                                                                         |
| Protection type                                                                    | IP20                                                                                                   |
| Pollution degree                                                                   | 2 per IEC 61131-2                                                                                      |
| Operating altitude                                                                 | 0 ... 2000 m / 0 ... 6562 ft                                                                           |
| Mounting position                                                                  | Horizontal left, horizontal right, horizontal top, horizontal bottom, vertical top and vertical bottom |
| Relative humidity (without condensation)                                           | 95 %                                                                                                   |
| Vibration resistance                                                               | 4g per IEC 60068-2-6                                                                                   |
| Shock resistance                                                                   | 15g per IEC 60068-2-27                                                                                 |
| EMC immunity to interference                                                       | per EN 61000-6-2, marine applications                                                                  |
| EMC emission of interference                                                       | per EN 61000-6-4, marine applications                                                                  |
| Exposure to pollutants                                                             | per IEC 60068-2-42 and IEC 60068-2-43                                                                  |
| Permissible H <sub>2</sub> S contaminant concentration at a relative humidity 75 % | 10 ppm                                                                                                 |
| Permissible SO <sub>2</sub> contaminant concentration at a relative humidity 75 %  | 25 ppm                                                                                                 |



| Commercial data       |                 |
|-----------------------|-----------------|
| Product Group         | 15 (I/O System) |
| PU (SPU)              | 1 pcs           |
| Packaging type        | Box             |
| Country of origin     | DE              |
| GTIN                  | 4045454487225   |
| Customs tariff number | 85389099990     |

| Product classification |          |
|------------------------|----------|
| UNSPSC                 | 32101502 |

| Environmental Product Compliance          |                                           |
|-------------------------------------------|-------------------------------------------|
| CAS-No.                                   | 1303-86-2<br>1317-36-8<br>7439-92-1       |
| REACH Candidate List Substance            | Diboron trioxide<br>Lead<br>Lead monoxide |
| RoHS Compliance Status                    | Compliant,With Exemption                  |
| RoHS Exemption                            | 7(c)-I                                    |
| SCIP notification number (Austria)        | cd8b0c72-5b85-41e7-8ffb-b65ef5b53b2d      |
| SCIP notification number (Belgium)        | be9a6e1a-6b9b-4735-8feb-db40a307d219      |
| SCIP notification number (Bulgaria)       | 7fed6a60-ac86-415a-bc0c-74deaf79d5da      |
| SCIP notification number (Czech Republic) | c2106b6a-e8f3-4ce0-8ca5-5de6507727b4      |
| SCIP notification number (Denmark)        | 8fd2911b-e756-4800-aad9-ef75a7c55550      |
| SCIP notification number (Finland)        | 6f04d3ad-2d8d-4de3-adf7-d1e3a0edb026      |
| SCIP notification number (France)         | c4beea44-6787-49a1-a342-eb938fbfac64      |
| SCIP notification number (Germany)        | 5d4b158b-cc48-403b-ba99-b45b142e4879      |
| SCIP notification number (Hungary)        | a47dfbba-e349-4083-8b5a-4af55ea326b1      |
| SCIP notification number (Italy)          | a3e4830d-5ad6-470c-9e87-1e3467110574      |
| SCIP notification number (Netherlands)    | 4e2f4ff9-8f45-4ae4-8908-936609da7f2a      |
| SCIP notification number (Poland)         | a1c08d0d-0a83-4acb-895b-78d928c3afdf      |
| SCIP notification number (Romania)        | 2060516d-acd6-41fa-a10e-db9324cae143      |
| SCIP notification number (Sweden)         | 6f57d416-d9e8-433f-abf9-25943d4feba1      |

Approvals / Certificates

| General approvals                                                                                                                                                                                                                                          |                        |                     | Declarations of conformity and manufacturer's declarations |          |                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------|------------------------------------------------------------|----------|------------------|
|    |                        |                     |                                                            |          |                  |
| Approval                                                                                                                                                                                                                                                   | Standard               | Certificate Name    | Approval                                                   | Standard | Certificate Name |
| EAC<br>GZO Almaty Standart                                                                                                                                                                                                                                 | TP TC 020/2011         | EAC CoC 03083       | EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG    | -        | -                |
| KC<br>National Radio Research<br>Agency                                                                                                                                                                                                                    | Article 58-2, Clause 3 | MSIP-REM-W43-AIM750 | UK-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG    | -        | -                |
| UL<br>Underwriters Laboratories<br>Inc. (ORDINARY LOCATI-<br>ONS)                                                                                                                                                                                          | UL 508                 | E175199             |                                                            |          |                  |



Approvals for marine applications



| Approval                                                        | Standard             | Certificate Name  |
|-----------------------------------------------------------------|----------------------|-------------------|
| ABS<br>American Bureau of Ship-<br>ping                         | -                    | 22-2219060        |
| BSH<br>Bundesamt fuer See-<br>schifffahrt und Hydrogra-<br>phie | -                    | 1104              |
| BV<br>Bureau Veritas S.A.                                       | -                    | 13453/E0 BV       |
| DNV<br>DNV GL SE                                                | DNV-CG-0339,Aug.2021 | TAA0000194        |
| KR<br>Korean Register of Ship-<br>ping                          | -                    | KR HMB05880-AC001 |
| LR<br>Lloyds Register EMEA                                      | -                    | LR22180952TA      |
| PRS<br>Polski Rejestr Statków                                   | -                    | TE/1101/880590/23 |
| RINA<br>RINA Germany GmbH                                       | -                    | ELE343521XG001    |

Approvals for hazardous areas



| Approval                                                   | Standard    | Certificate Name                           |
|------------------------------------------------------------|-------------|--------------------------------------------|
| ATEX<br>TUEV Nord Cert GmbH                                | EN 60079-0  | TUEV14ATEX148929X (II 3 G Ex ec IIC T4 Gc) |
| CCCEX<br>CQST/CNEx                                         | CNCA-C23-01 | 2020312310000213 (Ex ec IIC T4 Gc)         |
| IECEx<br>TUEV Nord Cert GmbH                               | IEC 60079-0 | IECEx TUN 14.0035 X (Ex ec IIC T4 Gc)      |
| INMETRO<br>TÜV Rheinland do Brasil Ltda.                   | IEC 60079-0 | TÜV 12.1297 X                              |
| UKEx<br>WAGO GmbH & Co. KG                                 | EN 60079-0  | UKCA_WA GO22UKEX003X_ec                    |
| UL<br>Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS) | UL 121201   | E198726                                    |

Downloads

Environmental Product Compliance

| Compliance Search                                   |
|-----------------------------------------------------|
| Environmental Product Compliance<br>750-461/003-000 |

Documentation

| Manual                                                       |
|--------------------------------------------------------------|
| Product Manual 2-channel Analog Input for Resistance Sensors |
| V 1.4.1                                                      |
| pdf<br>2916.84 KB                                            |
| System Manual Series 750/753                                 |

| System Description                                      |
|---------------------------------------------------------|
| 750/753 Series I/O-System – General Product Information |
| pdf<br>953.35 KB                                        |
| Overview on WAGO-I/O-SYSTEM 750 approvals               |
| pdf<br>770.48 KB                                        |

| Bid Text        |
|-----------------|
| 750-461/003-000 |
| 19.02.2019      |
| xml<br>4.86 KB  |
| 750-461/003-000 |
| 20.10.2017      |
| doc<br>28.50 KB |

| Instruction Leaflet             |
|---------------------------------|
| CCC Ex (Additional information) |
| 26.04.2023                      |
| pdf<br>159.76 KB                |



Application Notes

|                                          |                          |                   |                   |
|------------------------------------------|--------------------------|-------------------|-------------------|
| Application Note CoDeSys 2.3             |                          |                   |                   |
| Application Note Library ModuleAccess_01 | 05.01.2016<br>29.01.2016 | zip<br>1001.22 KB | <a href="#">↓</a> |

CAD/CAE-Data

|                                 |
|---------------------------------|
| CAD data                        |
| 2D/3D Models<br>750-461/003-000 |

[↓](#)

|                                      |
|--------------------------------------|
| CAE data                             |
| EPLAN Data Portal<br>750-461/003-000 |
| WSCAD Universe<br>750-461/003-000    |
| ZUKEN Portal<br>750-461/003-000      |

[↓](#)  
[↓](#)  
[↓](#)

Device Files

|                                                    |                       |                   |                   |
|----------------------------------------------------|-----------------------|-------------------|-------------------|
| Device Driver                                      |                       |                   |                   |
| WAGO USB Service Kabel Treiber / Serie 750 und 857 | 6.5.3.0<br>10.09.2014 | zip<br>4721.96 KB | <a href="#">↓</a> |

1 Compatible Products

1.1 Optional Accessories

1.1.1 DIN-rail

1.1.1.1 Mounting accessories

|                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br><b>Item No.: 210-196</b><br>Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored               | <br><b>Item No.: 210-198</b><br>Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored         | <br><b>Item No.: 210-508</b><br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored | <br><b>Item No.: 210-197</b><br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored                     |
| <br><b>Item No.: 210-506</b><br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored       | <br><b>Item No.: 210-114</b><br>Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored            | <br><b>Item No.: 210-118</b><br>Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored         | <br><b>Item No.: 210-115</b><br>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm; silver-colored |
| <br><b>Item No.: 210-112</b><br>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm; silver-colored | <br><b>Item No.: 210-504</b><br>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored | <br><b>Item No.: 210-113</b><br>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored          | <br><b>Item No.: 210-505</b><br>Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored      |



1.1.2 Marking

1.1.2.1 Group marker carrier



[Item No.: 750-106](#)  
Group marker carrier

1.1.2.2 Marker



[Item No.: 750-100](#)  
Marker card; as a DIN A4 sheet; plain



[Item No.: 2009-145/000-006](#)  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue



[Item No.: 2009-145/000-007](#)  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray



[Item No.: 2009-145/000-023](#)  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green



[Item No.: 2009-145/000-012](#)  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange



[Item No.: 2009-145/000-005](#)  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red



[Item No.: 2009-145/000-024](#)  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet



[Item No.: 2009-145](#)  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



[Item No.: 2009-145/000-002](#)  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow



[Item No.: 248-501/000-006](#)  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue



[Item No.: 248-501/000-007](#)  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray



[Item No.: 248-501/000-023](#)  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green



[Item No.: 248-501/000-017](#)  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green



[Item No.: 248-501/000-012](#)  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange



[Item No.: 248-501/000-005](#)  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red



[Item No.: 248-501/000-024](#)  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet



[Item No.: 248-501](#)  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



[Item No.: 248-501/000-002](#)  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

1.1.2.3 Marker carrier



[Item No.: 750-103](#)  
Group marker carrier

1.1.3 Shield termination

1.1.3.1 Shield clamping saddles



[Item No.: 790-108](#)  
Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm



[Item No.: 790-208](#)  
Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm



[Item No.: 790-116](#)  
Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm



[Item No.: 790-216](#)  
Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm



[Item No.: 790-124](#)  
Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm



[Item No.: 790-220](#)  
Shield clamping saddle; 30 mm wide; 6 ... 20 mm



[Item No.: 790-140](#)  
Shield clamping saddle; diameter of compatible conductor



1.1.4 System enclosure

1.1.4.1 System enclosure

|                                                                                                                                                                                                                              |                                                                                                                                                                                                                              |                                                                                                                                                                                                                                |                                                                                                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <br><b>Item No.: 850-825</b><br>IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20                              | <br><b>Item No.: 850-826</b><br>IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip         | <br><b>Item No.: 850-827</b><br>IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip          | <br><b>Item No.: 850-828</b><br>IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip |
| <br><b>Item No.: 850-826/002-000</b><br>IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip | <br><b>Item No.: 850-827/002-000</b><br>IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip | <br><b>Item No.: 850-828/002-000</b><br>IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip | <br><b>Item No.: 850-834</b><br>IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20                       |
| <br><b>Item No.: 850-835</b><br>IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip         | <br><b>Item No.: 850-836</b><br>IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip         | <br><b>Item No.: 850-814/002-000</b><br>IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate                 | <br><b>Item No.: 850-815/002-000</b><br>IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate         |
| <br><b>Item No.: 850-816/002-000</b><br>IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate                | <br><b>Item No.: 850-817/002-000</b><br>IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate                |                                                                                                                                                                                                                                |                                                                                                                                                                                                                         |