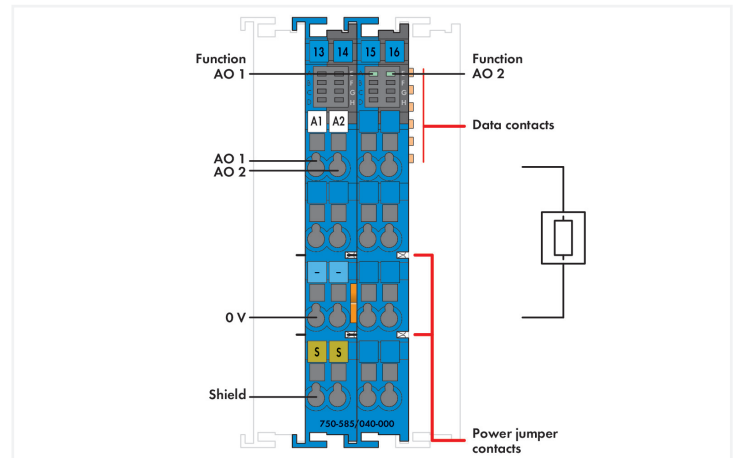
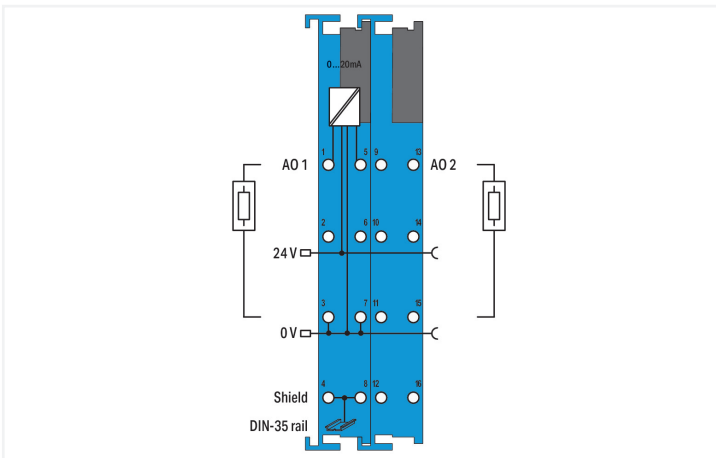
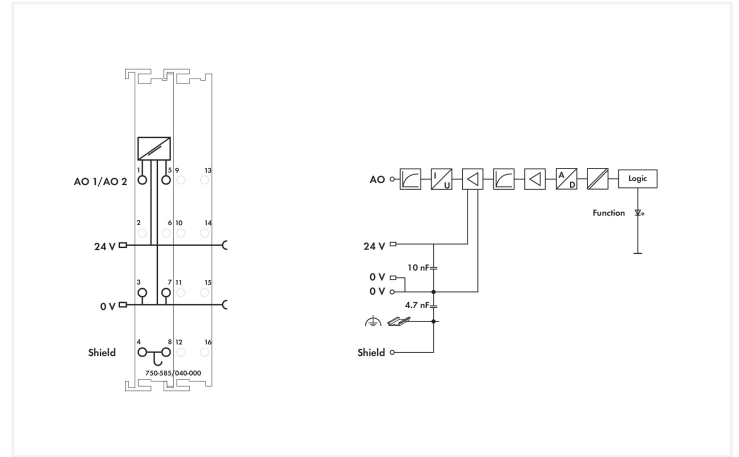




Color: ■ blue



This analog output module transmits intrinsically safe 0–20 mA signals in Zone 0+1 hazardous areas. The WAGO I/O System 750 XTR must be installed either in Zone 2 or in a non-hazardous area. Power is derived from the power jumper contacts. The outputs are short-circuit-protected.

Indicators:

- Green LED (output status)
- Field and system levels are electrically isolated.
- **The device is ideal for operation in extreme environments thanks to:**
- An extended temperature range
- Greater immunity to impulse voltages and electromagnetic interference
- Higher vibration and shock resistance

### Notes

|      |   |
|------|---|
| Note | The analog output module must only be operated via 24 VDC Ex i XTR power supply (750-606/040-000)!<br>General information (e.g., installation regulations) on explosion protection is available in the WAGO I/O System 750 XTR manuals! |
|------|---|

### Technical data

|  |  |
|--|--|
| Number of analog outputs   | 2  |
| Total number of channels (module)                                | 2  |
| Signal type  | Current  |
| Signal type (current)  | 0 ... 20 mADC  |
| Actuator connection  | 2 x (2-wire)   |
| Signal characteristics   | Single-ended   |
| Resolution [bit]   | 12 bits  |
| Conversion time (typ.)   | 2 ms   |
| Linearity  | ± 2 LSB  |
| Output error, reference temperature                              | 25 °C  |
| Output error, deviation (max.) of the upper-range value          | 0.2 %  |
| Temperature error (max.) of the output range value               | 0.01 %/K   |
| Load impedance (current output)                                  | ≤ 500 Ω  |
| Intrinsic safety Ex i  | Yes  |
| Data width   | 2 x 16-bit data  |
| Supply voltage (system)  | 5 VDC; via data contacts   |
| Current consumption (5 V system supply)                          | 21 mA  |
| Supply voltage (field)   | 24 VDC; (Ex i XTR power supply: U <sub>o</sub> = max. 26.8 V); via power jumper contacts (power supply via blade contact; transmission via spring contact) |
| Current consumption, field supply (module with no external load) | 19 mA  |
| Power consumption P <sub>max.</sub>                              | 1.5 W  |
| Power loss P <sub>I</sub>  | 0.9 W  |
| Isolation  | 300 VAC system/supply  |
| Rated surge voltage  | 1 kV; Rated surge voltage between intrinsically safe and non-intrinsically safe circuits: 1.5 kV (EN 60079-11)   |
| Number of incoming power jumper contacts                         | 2  |
| Number of outgoing power jumper contacts                         | 2  |
| Current carrying capacity (power jumper contacts)                | 1 A  |
| Indicators   | LED (A, E) green: Function AO 1, AO 2  |
| Marking  | ATEX/IECEx: II 3 (1) G Ex ec [ia Ga] IIC T4 Gc; II (1) D [Ex ia Da] IIIC; I (M1) [Ex ia Ma] I  |

### Explosion protection

|                                |   |
|--------------------------------|---|
| Ex standard                    | EN/IEC 60079-0, -7, -11   |
| Safety-relevant data (circuit) | U <sub>o</sub> = 26.8 V; I <sub>o</sub> = 56.4 mA; P <sub>o</sub> = 378 mW; linear characteristic curve             |
| Reactances Ex ia IIC           | L <sub>o</sub> = 8.2 mH; C <sub>o</sub> = 0.092 μF  |
| Reactances Ex ia IIB           | L <sub>o</sub> = 46 mH; C <sub>o</sub> = 0.72 μF  |
| Reactances Ex ia IIA           | L <sub>o</sub> = 76 mH; C <sub>o</sub> = 2.37 μF  |
| Reactances Ex ia I             | L <sub>o</sub> = 100 mH; C <sub>o</sub> = 3.85 μF   |
| Reactances (note)              | Reactances without accounting for the concurrence of capacitance (C <sub>o</sub> ) and inductance (L <sub>o</sub> ) |

### Connection data

|                                       |  |
|---------------------------------------|--|
| Connection technology: inputs/outputs | 16 x CAGE CLAMP®                             |
| Connection type 1                     | Inputs/outputs                               |
| Solid conductor                       | 0.25 ... 2.5 mm <sup>2</sup> / 24 ... 14 AWG |
| Fine-stranded conductor               | 0.25 ... 2.5 mm <sup>2</sup> / 24 ... 14 AWG |
| Strip length                          | 8 ... 9 mm / 0.31 ... 0.35 inches            |

### Physical data

|                                   |                        |
|-----------------------------------|------------------------|
| Width                             | 24 mm / 0.945 inches   |
| Height                            | 100 mm / 3.937 inches  |
| Depth                             | 67.8 mm / 2.669 inches |
| Depth from upper-edge of DIN-rail | 60.6 mm / 2.386 inches |

### Mechanical data

|               |             |
|---------------|-------------|
| Mounting type | DIN-35 rail |
|---------------|-------------|

### Material data

|                    |                              |
|--------------------|------------------------------|
| Color              | blue                         |
| Housing material   | Polycarbonate; polyamide 6.6 |
| Fire load          | 2.031 MJ                     |
| Weight             | 92.8 g                       |
| Conformity marking | CE                           |

### Environmental requirements

|  |  |
|--|--|
| Ambient temperature (operation)  | -40 ... +70 °C   |
| Ambient temperature (storage)  | -40 ... +85 °C   |
| Protection type  | IP20   |
| Pollution degree   | 2 per IEC 61131-2  |
| Operating altitude   | without temperature derating: 0 ... 2000 m; with temperature derating: 2000 ... 5000 m (0.5 K/100 m); 5000 m (max.)                          |
| Mounting position  | horizontal (standing/lying); vertical  |
| Relative humidity (without condensation)   | 95 %   |
| Relative humidity (with condensation)  | Short-term condensation per Class 3K7/IEC EN 60721-3-3 and E-DIN 40046-721-3 (except for wind-driven precipitation, water and ice formation) |
| Vibration resistance   | per IEC 60068-2-6 (acceleration: 5g), EN 60870-2-2, IEC 60721-3-1, -3  |
| Shock resistance   | per IEC 60068-2-27 (15g/11 ms/half-sine/1,000 shocks; 25g/6 ms/1,000 shocks), EN 61373   |
| EMC immunity to interference   | per EN 61000-6-1, -2, EN 61131-2, marine applications, EN 60255-26, EN 60870-2-1, EN 61850-3, IEC 61000-6-5, IEEE 1613, VDEW: 1994           |
| EMC emission of interference   | per EN 61000-6-3, -4, EN 61131-2, EN 60255-26, marine applications, EN 60870-2-1, EN 61850-3   |
| 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


|                       |             |
|-----------------------|-------------|
| eCl@ss 10.0           | 27-24-26-01 |
| eCl@ss 9.0            | 27-24-26-01 |
| ETIM 8.0              | EC001596    |
| ETIM 7.0              | EC001596    |
| PU (SPU)              | 1 pcs       |
| Packaging type        | Box         |
| Country of origin     | DE          |
| Customs tariff number | 85389099990 |

**Environmental Product Compliance**

|                        |                                   |
|------------------------|-----------------------------------|
| RoHS Compliance Status | Compliant,With Exemption          |
| RoHS Exemption         | 6(c)<br>7(a)<br>7(c)-I<br>7(c)-II |

**Approvals / Certificates**


**General approvals** **Declarations of conformity and manufacturer's declarations**



| Approval  | Standard       | Certificate Name                |
|---|----------------|---------------------------------|
| EAC<br>Brjansker Zertifizierungs-<br>stelle                       | TP TC 020/2011 | EAC RU C-DE.AM02.<br>B.00087/19 |
| UL<br>Underwriters Laboratories<br>Inc. (ORDINARY LOCATI-<br>ONS) | -              | E175199                         |


| Approval  | Standard | Certificate Name |
|---|----------|------------------|
| EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | -        | -                |

**Approvals for marine applications**



| Approval                                | Standard | Certificate Name  |
|---|----------|-------------------|
| ABS<br>American Bureau of Ship-<br>ping | -        | 22-2208829-PDA    |
| DNV<br>DNV GL SE                        | -        | TAA00000Y7        |
| LR<br>Lloyds Register                   | -        | LR22276776TA      |
| PRS<br>Polski Rejestr Statków           | -        | TE/2215/880590/18 |


**Approvals for hazardous areas**



| Approval   | Standard       | Certificate Name   |
|--|----------------|--|
| ATEX<br>TUEV Nord Cert GmbH  | EN 60079-0     | TUEV_17_ATEX_196484X<br>(Ex ec[iaGa] IIC T4 Gc, [Ex<br>iaDa] IIIC, [Ex iaMa] I)          |
| CCC<br>CNEX  | CNCA-C23-01    | 2020312310000212 (Ex<br>ec[iaGa]IIC T4 Gc, [Ex ia<br>Da]IIIC, [Ex ia Ma]I)               |
| EAC<br>Brjansker Zertifizierungs-<br>stelle                        | TP TC 012/2011 | EAC RU C-DE.AM02.<br>B.00163/19 ([ExiaMa]I<br>X,2Ex e[iaGa]IIC T4Gc<br>X,[ExiaDa]IIIC X) |
| IECEx<br>TUEV Nord Cert GmbH                                       | IEC 60079-0    | IECEx TUN 17.0005X (Ex<br>ec[iaGa] IIC T4 Gc, [Ex ia-<br>Da] IIIC, [Ex iaMa] I)          |
| UL<br>Underwriters Laboratories<br>Inc. (HAZARDOUS LOCA-<br>TIONS) | UL 121201      | E198726 Sec.1  |

**Downloads**

**Environmental Product Compliance**

|  |
|--|
| <b>Compliance Search</b>   |
| Environmental Product<br>Compliance<br>750-585/040-000  |

**Documentation**

| Manual                                       |                       |                   |                   | System Description   |            |                  |                   |
|--|-----------------------|-------------------|-------------------|--|------------|------------------|-------------------|
| Product Manual 2-channel, 0-20mA, Ex i / XTR | V 1.1.0<br>08.06.2020 | pdf<br>3236.39 KB | <a href="#">↓</a> | Intrinsically Safe XTR Modules – General Product Information |            | pdf<br>214.93 KB | <a href="#">↓</a> |
|  |                       |                   |                   | Overview on WAGO-I/O-SYSTEM 750 approvals                    |            | pdf<br>770.48 KB | <a href="#">↓</a> |
| Bid Text                                     |                       |                   |                   | Instruction Leaflet  |            |                  |                   |
| 750-585/040-000                              | 19.02.2019            | xml<br>8.24 KB    | <a href="#">↓</a> | CCC Ex (Additional information)                              | 26.04.2023 | pdf<br>143.50 KB | <a href="#">↓</a> |
| 750-585/040-000                              | 08.02.2018            | doc<br>34.00 KB   | <a href="#">↓</a> |  |            |                  |                   |

**CAD/CAE-Data**













| CAD data                        |                   | CAE data                             |                   |
|---------------------------------|-------------------|--------------------------------------|-------------------|
| 2D/3D Models<br>750-585/040-000 | <a href="#">↓</a> | EPLAN Data Portal<br>750-585/040-000 | <a href="#">↓</a> |
|                                 |                   | ZUKEN Portal<br>750-585/040-000      | <a href="#">↓</a> |

**1 Compatible Products**

**1.1 Optional Accessories**

**1.1.1 DIN-rail**

**1.1.1.1 Mounting accessories**

|  |   |  |  |
|--|---|--|--|
|   |    |    |   |
| <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               | <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         | <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 | <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                     |
|   |    |    |   |
| <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       | <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            | <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         | <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 |
|   |    |    |   |
| <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 | <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 | <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          | <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.: 750-107**  
Group marker carrier

#### 1.1.2.2 Marker

**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 Power supply

#### 1.1.3.1 Supply module



**Item No.: 750-606/040-000**  
Power Supply; 24 VDC; Diagnostics; Intrinsically safe; Extreme

### 1.1.4 Shield termination

#### 1.1.4.1 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