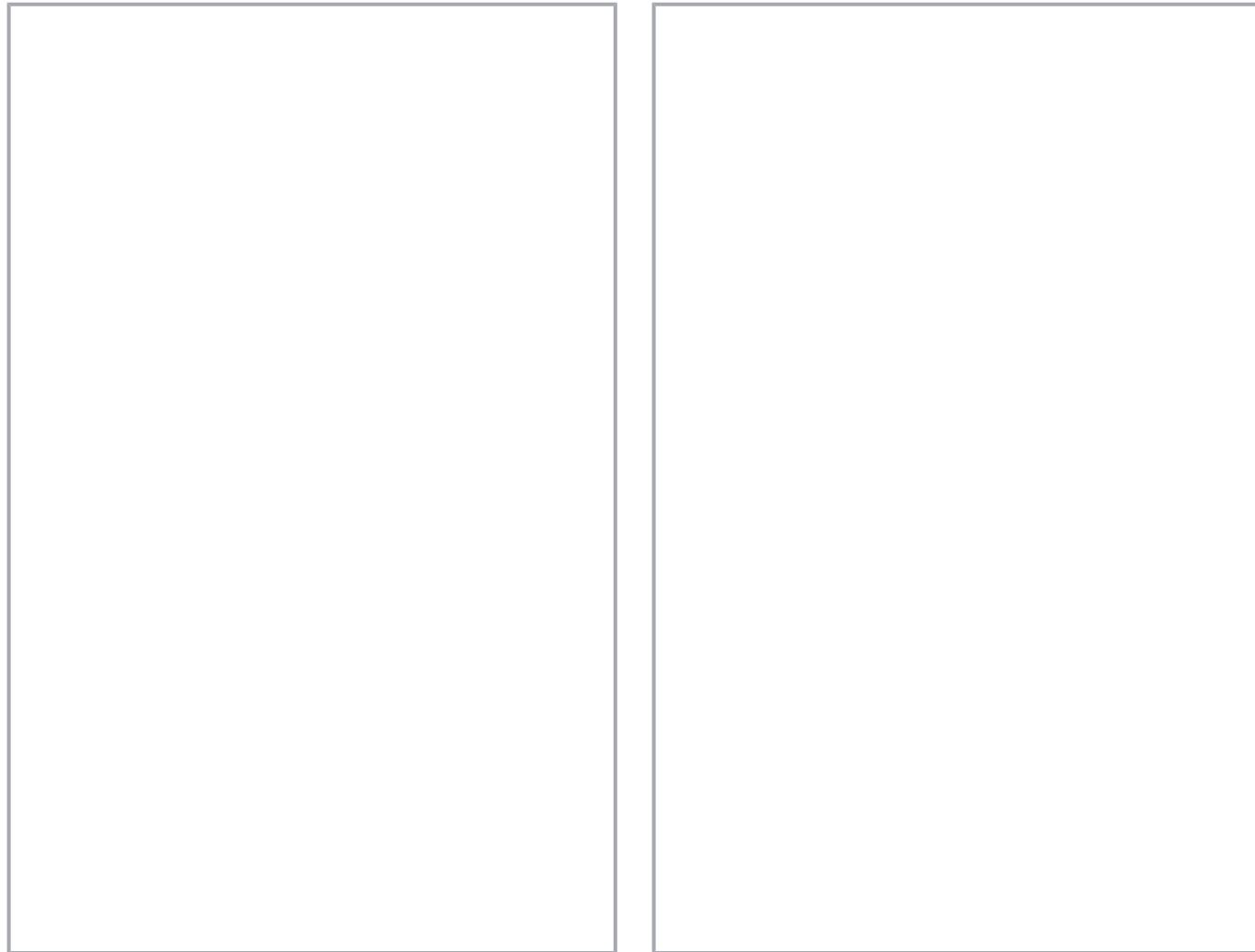


Data sheet | Item number: 750-1516/040-000 **NEW**

8-channel digital output; 24 VDC; 0.5 A; Low-side switching; 2-conductor connection; Extreme

[www.wago.com/750-1516\\_040-000](http://www.wago.com/750-1516_040-000)

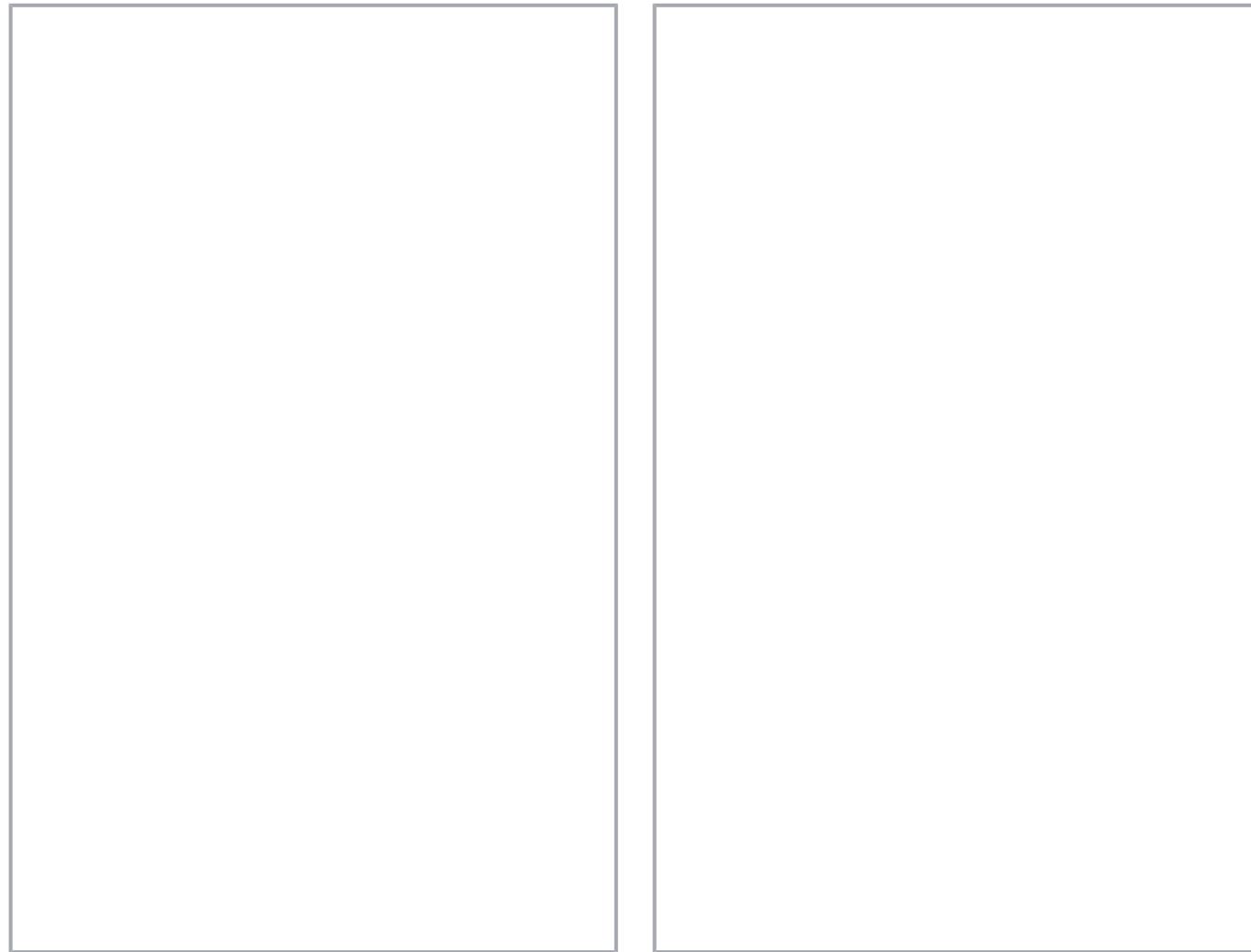


Subject to changes. Please also observe the further product documentation!

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WAGO Corporation  
Germantown, WI 53022  
Phone: 1-800-DIN-RAIL (346-7245) | Fax: (262) 255-6222  
Email: [info.us@wago.com](mailto:info.us@wago.com) | Web: [www.wago.us](http://www.wago.us)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.



## Item description

This digital output module is a 2-wire device featuring eight channels in a width of just 12 mm (0.47 inch).

It transmits binary control signals from the automation device to the connected actuators (e.g., magnetic valves, contactors, transmitters, relays or other electrical loads).

The module features Push-in CAGE CLAMP® connections enabling solid conductors to be connected by simply pushing them in.

A green LED indicates the signal state of each channel.

Field and system levels are electrically isolated.

An operating tool with a 2.5 mm blade (210-719) is required to open the Push-in CAGE CLAMP® connections.

**The device is ideal for operation in extreme environments thanks to:**

Subject to changes. Please also observe the further product documentation!

- Extended temperature range
- Greater immunity to impulse voltages and electromagnetic interference
- Higher vibration and shock resistance

## Data

### Technical data

Number of digital outputs	8
Number of Channels	8
Signal type	Voltage
Signal type (voltage)	24 VDC
Actuator connection	8 x (2-wire)
Output characteristic	Low-side switching
Output current per channel	0.5 A
Output current	Short-circuit-protected
Switching frequency (max.)	1 kHz
Load type	Resistive, inductive, lamp load
Output data width (internal) max.	8 bits
Supply voltage (system)	5 VDC; via data contacts
Current consumption (5 V system supply)	20 mA
Supply voltage (field)	24 VDC (-25 ... +30 %); via power jumper contacts (power supply via blade contact; transmission via spring contact); Derating must be observed!
Current consumption, field supply (module with no external load)	8 mA
Dielectric strength	510 VAC/775 VDC; per EN 60870-2-1
Rated surge voltage	1 kV
Indicators	LED (1-8) green: Status DO 1 ... DO 8
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2
Current carrying capacity (power jumper contacts)	10 A
Derating	Derating (supply voltage): Surrounding air temperatures under laboratory conditions: (-25 ... +30 %); for -40 ... +55 °C: 24 V (-25 ... +20 %); for +55 ... +70 °C: 24 V (-25 ... +10 %); Lower limit in all temperature ranges: -27.5 % (including 15 % residual ripple)

### Connection data

Connection technology: inputs / outputs	16 x Push-in CAGE CLAMP®
Connection type 1	Inputs/outputs

Subject to changes. Please also observe the further product documentation!

Solid conductor	0.25 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG
Fine-stranded conductor	0.25 ... 1.5 mm <sup>2</sup> / 24 ... 16 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inch

## Physical data

Width	12 mm / 0.472 inch
Height	100 mm / 3.937 inch
Depth	69 mm / 2.717 inch
Depth from upper-edge of DIN-rail	61.8 mm / 2.433 inch

## Mechanical data

Mounting type	DIN-35 rail
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## Material data

Color	dark gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	0.158 MJ
Weight	59.8 g
Conformity marking	CE

## Environmental requirements

Ambient temperature (operation)	-40 ... +70 °C
Surrounding air temperature (storage)	-40 ... +85 °C
Protection type	IP20
Pollution degree (5)	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, EN 50155; EN 61373
Shock resistance	Per IEC 60068-2-27 (15g/11 ms/half-sine/1,000 shocks; 25g/6 ms/1,000 shocks), EN 50155, EN 61373
EMC immunity to interference	Per EN 61000-6-1, -2; EN 61131-2; marine applications; EN 50121-3-2; EN 50121-4, -5; EN 60255-26;

Subject to changes. Please also observe the further product documentation!

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, EN 50121-3-2, EN 50121-4, -5
Exposure to pollutants	Per IEC 60068-2-42 and IEC 60068-2-43
Permissible pollutant concentration H <sub>2</sub> S at a relative humidity < 75%	10 ppm
Permissible pollutant concentration SO <sub>2</sub> at a relative humidity < 75%	25 ppm

## Commercial data

PU (SPU)	1 Pieces
Country of origin VKOrg Germany	DE
GTIN	4066966204070
Customs tariff number VKOrg Germany	85371098990

## Approvals / Certificates

### Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1

### Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	DNV DNV Germany GmbH	DNV-CG-0339,Aug.2021	TAA00000Y7

### UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	E175199

## Optional accessories

### Marking accessories

Subject to changes. Please also observe the further product documentation!

## Accessories

**Item no.: 750-103**  
Group marker carrier

[www.wago.com/750-103](http://www.wago.com/750-103)

**Item no.: 750-107**  
Group marker carrier

[www.wago.com/750-107](http://www.wago.com/750-107)

## 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

[www.wago.com/2009-145/000-006](http://www.wago.com/2009-145/000-006)

**Item no.: 2009-145**

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

[www.wago.com/2009-145](http://www.wago.com/2009-145)

**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

[www.wago.com/2009-145/000-002](http://www.wago.com/2009-145/000-002)

**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

[www.wago.com/2009-145/000-007](http://www.wago.com/2009-145/000-007)

**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

[www.wago.com/2009-145/000-005](http://www.wago.com/2009-145/000-005)

**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

[www.wago.com/2009-145/000-012](http://www.wago.com/2009-145/000-012)

**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

[www.wago.com/2009-145/000-023](http://www.wago.com/2009-145/000-023)

**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

[www.wago.com/2009-145/000-024](http://www.wago.com/2009-145/000-024)



**Item no.: 248-501/000-006**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue

[www.wago.com/248-501/000-006](http://www.wago.com/248-501/000-006)



**Item no.: 248-501/000-007**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray

[www.wago.com/248-501/000-007](http://www.wago.com/248-501/000-007)



**Item no.: 248-501/000-002**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow

[www.wago.com/248-501/000-002](http://www.wago.com/248-501/000-002)

Subject to changes. Please also observe the further product documentation!

**Item no.: 248-501/000-012**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange

[www.wago.com/248-501/000-012](http://www.wago.com/248-501/000-012)**Item no.: 248-501**

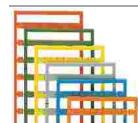
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

[www.wago.com/248-501](http://www.wago.com/248-501)**Item no.: 248-501/000-017**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green

[www.wago.com/248-501/000-017](http://www.wago.com/248-501/000-017)**Item no.: 248-501/000-005**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red

[www.wago.com/248-501/000-005](http://www.wago.com/248-501/000-005)**Item no.: 248-501/000-024**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet

[www.wago.com/248-501/000-024](http://www.wago.com/248-501/000-024)**Item no.: 248-501/000-023**

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green

[www.wago.com/248-501/000-023](http://www.wago.com/248-501/000-023)**System housing****Enclosures****Item no.: 850-814/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate

[www.wago.com/850-814/002-000](http://www.wago.com/850-814/002-000)**Item no.: 850-815/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate

[www.wago.com/850-815/002-000](http://www.wago.com/850-815/002-000)**Item no.: 850-816/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate

[www.wago.com/850-816/002-000](http://www.wago.com/850-816/002-000)**Item no.: 850-817/002-000**

IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate

[www.wago.com/850-817/002-000](http://www.wago.com/850-817/002-000)**Item no.: 850-825**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20

[www.wago.com/850-825](http://www.wago.com/850-825)**Item no.: 850-826**

IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip

[www.wago.com/850-826](http://www.wago.com/850-826)**Item no.: 850-827**

Subject to changes. Please also observe the further product documentation!



IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip [www.wago.com/850-827](http://www.wago.com/850-827)

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**Item no.: 850-827/002-000**  
IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip [www.wago.com/850-827/002-000](http://www.wago.com/850-827/002-000)

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**Item no.: 850-826/002-000**  
IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip [www.wago.com/850-826/002-000](http://www.wago.com/850-826/002-000)

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**Item no.: 850-828/002-000**  
IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip [www.wago.com/850-828/002-000](http://www.wago.com/850-828/002-000)




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**Item no.: 850-828**  
IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip [www.wago.com/850-828](http://www.wago.com/850-828)

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**Item no.: 850-834**  
IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20 [www.wago.com/850-834](http://www.wago.com/850-834)

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**Item no.: 850-835**  
IP65 enclosure; Polyester (RAL 7032); WxHxD (244x100x164 mm); 4 x M20, 4 x M16, 14 x M12 cable grip [www.wago.com/850-835](http://www.wago.com/850-835)

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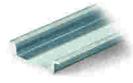
**Item no.: 850-836**  
IP65 enclosure; Polyester (RAL 7032); WxHxD (324x100x164 mm); 4 x M20, 8 x M16, 17 x M12 cable grip [www.wago.com/850-836](http://www.wago.com/850-836)

## Carrier rail

### Mounting accessories

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**Item no.: 210-197**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715; silver-colored [www.wago.com/210-197](http://www.wago.com/210-197)




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**Item no.: 210-198**  
Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; copper-colored [www.wago.com/210-198](http://www.wago.com/210-198)




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**Item no.: 210-504**  
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; silver-colored [www.wago.com/210-504](http://www.wago.com/210-504)




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**Item no.: 210-505**  
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored [www.wago.com/210-505](http://www.wago.com/210-505)




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**Item no.: 210-506**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored [www.wago.com/210-506](http://www.wago.com/210-506)

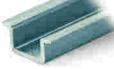



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**Item no.: 210-508**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored [www.wago.com/210-508](http://www.wago.com/210-508)

Subject to changes. Please also observe the further product documentation!

	<b>Item no.: 210-113</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	<a href="http://www.wago.com/210-113">www.wago.com/210-113</a>
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	<b>Item no.: 210-118</b> Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored	<a href="http://www.wago.com/210-118">www.wago.com/210-118</a>
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	<b>Item no.: 210-112</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 25 mm"; <a href="http://www.wago.com/210-112">www.wago.com/210-112</a> ; silver-colored	<a href="http://www.wago.com/210-112">www.wago.com/210-112</a>
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	<b>Item no.: 210-114</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-114">www.wago.com/210-114</a>
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	<b>Item no.: 210-115</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm"; <a href="http://www.wago.com/210-115">www.wago.com/210-115</a> ; silver-colored	<a href="http://www.wago.com/210-115">www.wago.com/210-115</a>
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	<b>Item no.: 210-196</b> Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-196">www.wago.com/210-196</a>
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**Shield termination**

Shield clamping saddles

	<b>Item no.: 790-216</b> Shield clamping saddle; 21.8 mm wide; 6-16 mm diameter conductors	<a href="http://www.wago.com/790-216">www.wago.com/790-216</a>
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	<b>Item no.: 790-220</b> Shield clamping saddle; 30 mm wide; 6-20 mm diameter	<a href="http://www.wago.com/790-220">www.wago.com/790-220</a>
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	<b>Item no.: 790-208</b> Shield clamping saddle; 12.4 mm wide; 3-8 mm diameter conductors	<a href="http://www.wago.com/790-208">www.wago.com/790-208</a>
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**Shield**

	<b>Item no.: 790-116</b> Shield clamping saddle; 19 mm wide; 7-16 mm diameter conductors	<a href="http://www.wago.com/790-116">www.wago.com/790-116</a>
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	<b>Item no.: 790-124</b> Shield clamping saddle; 27 mm wide; 6-24 mm diameter conductors	<a href="http://www.wago.com/790-124">www.wago.com/790-124</a>
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	<b>Item no.: 790-108</b> Shield clamping saddle; 11 mm wide; 0-8 mm diameter conductors	<a href="http://www.wago.com/790-108">www.wago.com/790-108</a>
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	<b>Item no.: 790-140</b> Shield clamping saddle; 43 mm wide; 22-40 mm diameter conductors	<a href="http://www.wago.com/790-140">www.wago.com/790-140</a>
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**Supply module**

I/O Modules

	<b>Item no.: 750-602/040-000</b> Power Supply; 24 VDC; Extreme	<a href="http://www.wago.com/750-602/040-000">www.wago.com/750-602/040-000</a>
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Subject to changes. Please also observe the further product documentation!

**Item no.: 750-612/040-000**

Power Supply; 0 ... 230 V AC/DC; Extreme

[www.wago.com/750-612/040-000](http://www.wago.com/750-612/040-000)**Tools**

Operating tool

**Item no.: 210-719**

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

[www.wago.com/210-719](http://www.wago.com/210-719)**Downloads****Documentation****Manual**

8-channel digital output; 24 VDC; 0.5 A; Low-side switching; 2-conductor connection; for eXTReme environmental conditions	V 1.0.0 2022 Feb 9	pdf 3.0 MB	Download
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System Manual XTR Basic conditions and recommendations for higher operational safety	V 1.3.1 2021 Dec 2	pdf 6.4 MB	Download
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System Manual Series 750/753 Online HTML	URL	Download
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**Bid Text**

750-1516/040-000 X81 - Datei	xml 8.5 kB	Download
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750-1516/040-000 docx - Datei	docx 36.8 kB	Download
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**System Description**

System Manual XTR Basic conditions and recommendations for higher operational safety	V 1.3.1 2021 Dec 2	pdf 6.4 MB	Download
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Overview on WAGO-I/O-SYSTEM 750 approvals	pdf 789.0 kB	Download
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750 XTR Series I/O-System – General Product Information	pdf 743.5 kB	Download
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**Environmental Product Compliance****Compliance Search**

Subject to changes. Please also observe the further product documentation!

Environmental Product Compliance 750-1516/040-000

URL

Download

8-channel digital output; 24 VDC; 0.5 A; Low-side switching; 2-conductor connection;  
Extreme

## Installation Notes

### Product family

[Couglers & I/O modules: XTR](#)

I/O-System 750 XTR: Dort automatisieren, wo jedes andere System an seine Grenzen stößt – und das zuverlässig und wirtschaftlich! XTR – dieses Kürzel im Systemnamen steht für extremen Schutz vor klimatischen Einflüssen, Schwingungen, Erschütterungen und Überspannungen.

[Show all products from the family](#)

Subject to changes. Please also observe the further product documentation!

WAGO Corporation  
Germantown, WI 53022

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Email: [info.us@wago.com](mailto:info.us@wago.com) | Web: [www.wago.us](http://www.wago.us)

Do you have any questions about our products?  
We are always happy to take your call at +49 (571) 887-44222.