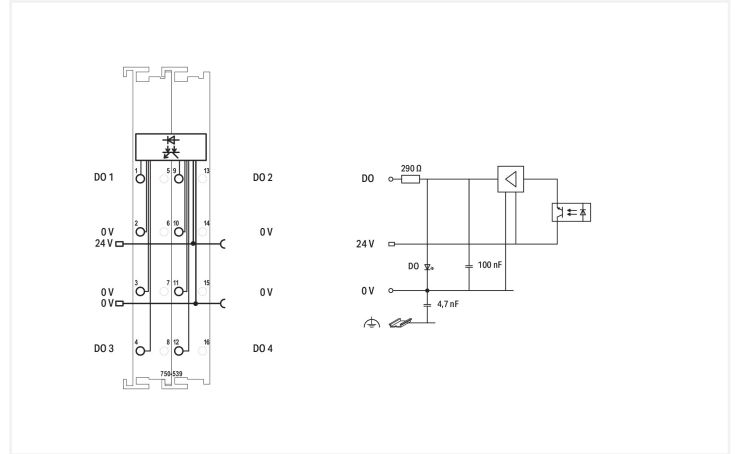
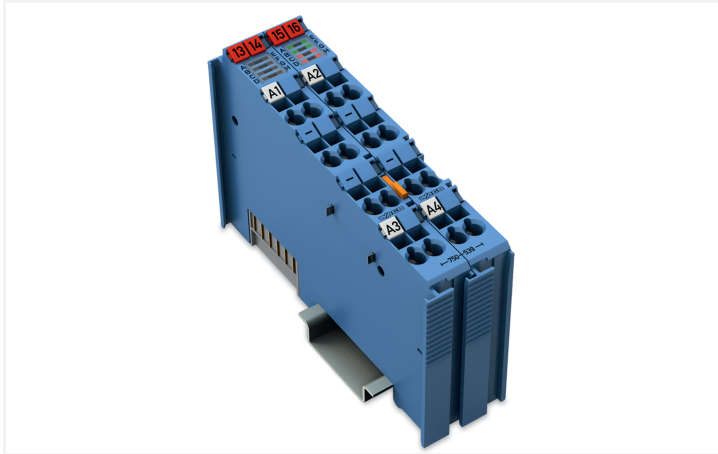
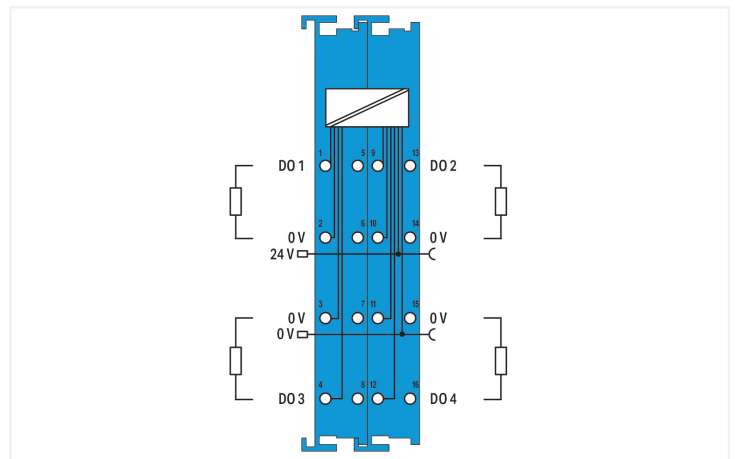
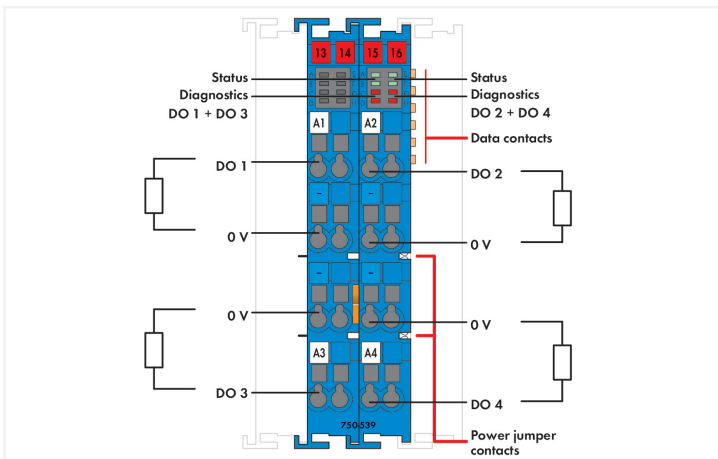


**Data Sheet | Item Number: 750-539**  
 4-channel digital output; 24 VDC; Valve; Intrinsically safe

<https://www.wago.com/750-539>



Color: ■ light blue



This digital output module controls actuators operating in Zone 0+1 hazardous areas.  
 Intrinsically safe valves can be directly controlled.  
 The WAGO I/O System 750/753 must be installed either in Zone 2 or in a non-hazardous area.  
 All outputs are electronically short-circuit-protected.

- Indicators:
- Green LED (output status)
  - Red LED (wire breakage, short circuit)

Field and system levels are electrically isolated.

**Notes**

Note

The digital output module must only be operated via 24 VDC Ex i!  
 General information on explosion protection, including installation regulations, can be found in the WAGO I/O System 750/753 manuals!

### Technical data

Item description	4-Channel Digital Output; 24 VDC; Valve
Number of digital outputs	4
Total number of channels (module)	4
Signal type	Digital
Signal type (voltage)	24 VDC
Actuator connection	4 x (2-wire)
Output current per channel	0.047 A
Output characteristic	high-side switching
Switching frequency (max.)	100 Hz
Load type	Resistive, inductive, lamp load
Internal resistance $R_i$	290 $\Omega$
Intrinsically safe Ex i	Yes
Input data width (internal) max.	4 bits
Output data width (internal) max.	4 bits
Supply voltage (system)	5 VDC; via data contacts
Current consumption (system supply)	20 mA
Supply voltage (field)	24 VDC; (Ex i power supply: $U_o = \max. 26.8 \text{ V}$ ); via power jumper contacts (supply via blade contact; distribution via spring contact)
Current consumption, field supply (module with no external load)	10 mA
Power consumption $P_{\max}$	4.86 W (at 47 mA output current)
Power loss $P_l$	2.86 W (at 47 mA output current)
Isolation	UM = 375 V system/supply
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, B, E, F) green: Status DO 1 ... DO 4; LED (C, D, G, H) red: Diagnostics DO 1 ... DO 4

### Explosion protection

Identification	<b>ATEX:</b> II 3 (1) G Ex ec [ia Ga] IIC T4 Gc; II (1) D [Ex ia Da] IIIC; I (M1) [Ex ia Ma] I <b>IECEX/INMETRO:</b> Ex ec [ia Ga] IIC T4 Gc; [Ex ia Da] IIIC; [Ex ia Ma] I
Ex standard	EN IEC 60079-0, -7, -11
Safety-relevant data (circuit)	$U_o = 26.8 \text{ V}$ ; $I_o = 115.3 \text{ mA}$ ; $P_o = 772 \text{ mW}$ ; linear characteristic curve
Reactances Ex ia IIC	$L_o = 2.67 \mu\text{H}$ ; $C_o = 92 \text{ nF}$
Reactances Ex ia IIB	$L_o = 10.69 \text{ mH}$ ; $C_o = 720 \text{ nF}$
Reactances Ex ia IIA	$L_o = 21.39 \text{ mH}$ ; $C_o = 2.37 \mu\text{F}$
Reactances Ex ia I	$L_o = 35.1 \text{ mH}$ ; $C_o = 4.2 \mu\text{F}$
Reactances (note)	Reactances without accounting for the concurrence of capacitance ( $C_o$ ) and inductance ( $L_o$ )

### Connection Data

Connection technology: I/O	8 x CAGE CLAMP®
Connectable conductor materials	Copper
Connection type	Inputs/outputs
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 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
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### Material data

Color	light blue
Housing material	Polycarbonate; polyamide 6.6
Fire load	1.691 MJ
Weight	88.5 g
Conformity marking	CE

### Environmental requirements

Ambient temperature (operation)	0 ... +55 °C
Ambient temperature (storage)	-25 ... +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 61000-6-3, 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

PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
GTIN	4055143514149
Customs tariff number	85371098990

### Product Classification

UNSPSC	32151705
eCl@ss 10.0	27-24-26-04
eCl@ss 9.0	27-24-26-04
ETIM 9.0	EC001599
ETIM 10.0	EC001599
ECCN	NO US CLASSIFICATION

### Environmental Product Compliance

CAS-No.	1303-86-2 1317-36-8 7439-92-1
REACH Candidate List Substance	Diboron trioxide Lead Lead monoxide
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	e34a3d4a-a1fb-40f8-bb5b-54bf7c28fdaa
SCIP notification number (Belgium)	2ce8ca47-89a4-4c43-9427-dd8fe99d3e7b
SCIP notification number (Bulgaria)	75528983-07fe-4087-af2d-af7edf979c73
SCIP notification number (Czech Republic)	f9fb62b0-c110-4b20-b537-5f7510b2a650
SCIP notification number (Denmark)	64b48830-f285-4cef-aac8-318ab049c8ef
SCIP notification number (Finland)	d21d7caf-d593-4078-a77f-144b060c5b80
SCIP notification number (France)	8b7b3506-826e-4320-9f88-d4aca5af520d
SCIP notification number (Germany)	8ec2c402-dd38-40d4-a575-630c5dcb958a
SCIP notification number (Hungary)	441ec9b2-f306-4c04-afe9-d73926e312af
SCIP notification number (Italy)	74e79e14-0ac4-47f2-8486-55872426dabd
SCIP notification number (Netherlands)	74678b8e-c44c-499b-a41f-66be291f6a26
SCIP notification number (Poland)	7afc2831-b145-414f-83b7-93c174189b9a
SCIP notification number (Romania)	470ef858-fac1-4205-8178-bee373f05ff7
SCIP notification number (Sweden)	3528ae04-7447-476d-a23d-783b22d2f64a

### Approvals / Certificates

#### General approvals



Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-DOM750
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	-	E175199

#### Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Ex-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Ex-Declaration of Conformity WAGO GmbH & Co. KG	-	-

#### Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	25-0415412
DNV DNV GL SE	DNV-CG-0339,Aug.2021	TAA0000194
KR Korean Register of Shipping	-	KR HMB05880-AC001
LR Lloyds Register EMEA	-	LR22180952TA
PRS Polski Rejestr Statków	-	TE/1101/880590/23

#### Approvals for marine applications

RINA RINA Germany GmbH	-	ELE343521XG001
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Approvals for hazardous areas



Approval	Standard	Certificate Name
ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV12ATEX106032X (Ex ec[iaGa] IIC T4 Gc, [Ex iaDa] IIIC, [Ex iaMa] I)
CCC CNEX	CNCA-C23-01	2020312310000211 (Ex ec [iaGa] IIC T4 Gc, [Ex iaDa] II-IC, [Ex iaMa] I)
IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX TUN12.0039X (Ex ec [iaGa] IIC T4 Gc, [Ex iaDa] II-IC, [Ex iaMa] I)
INMETRO TÜV Rheinland do Brasil Ltda.	-	TÜV_14.1911_X
KTL Korea Testing Laboratory	KOSHA Article 34, IEC60079-0	21-KA4BO-0560X
UKEx Element Materials Technology UK	-	EMA21UKEX0069X
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 750-539 <a href="#">↓</a>

Documentation

Manual			
Product Manual 4-Channel, 24 VDC, VALVE Ex i	2485615371   3   en-US   2025-09-11 11:33 14.11.2025	pdf 2999.10 KB	<a href="#">↓</a>
System Manual Series 750/753			<a href="#">↓</a>

System Description		
750/753 Series I/O-System – General Product Information	pdf 953.35 KB	<a href="#">↓</a>
Overview on WAGO-I/O-SYSTEM 750 approvals	pdf 770.48 KB	<a href="#">↓</a>
Ex i Overview	pdf 442.07 KB	<a href="#">↓</a>

Bid Text			
750-539	19.02.2019	xml 5.84 KB	<a href="#">↓</a>
750-539	06.10.2017	doc 31.50 KB	<a href="#">↓</a>

Instruction Leaflet			
CCC Ex (Additional information)	26.04.2023	pdf 143.96 KB	<a href="#">↓</a>

**CAD/CAE-Data**

**CAD data**  
2D/3D Models 750-539

**CAE data**  
EPLAN Data Portal 750-539

WSCAD Universe 750-539

ZUKEN Portal 750-539

**1 Compatible Products**

**1.1 Optional Accessories**

**1.1.1 DIN-rail**

**1.1.1.1 Mounting accessories**



**Item No.: 210-196**  
Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



**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



**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



**Item No.: 210-114**  
Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715; silver-colored



**Item No.: 210-118**  
Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715; silver-colored



**Item No.: 210-115**  
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



**Item No.: 210-112**  
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



**Item No.: 210-113**  
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; 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

### 1.1.2.2 Marker



**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 Supply module

#### 1.1.4.1 Supply module



**Item No.: 750-606**

Power Supply; 24 VDC; Diagnostics; Intrinsically safe



**Item No.: 750-625/000-001**

Power Supply; 24 VDC; Intrinsically safe