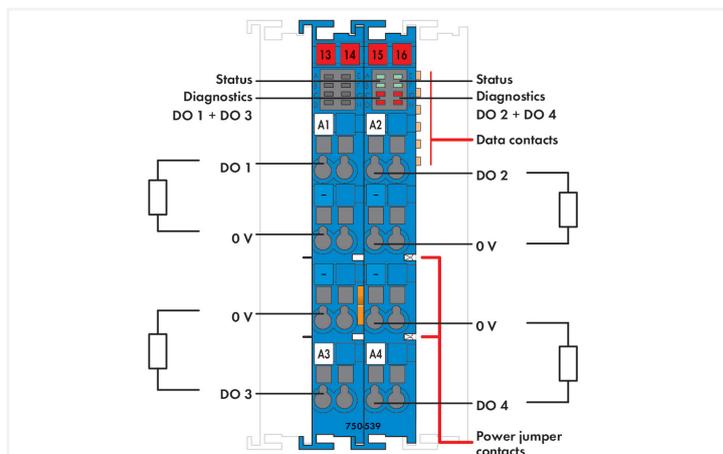
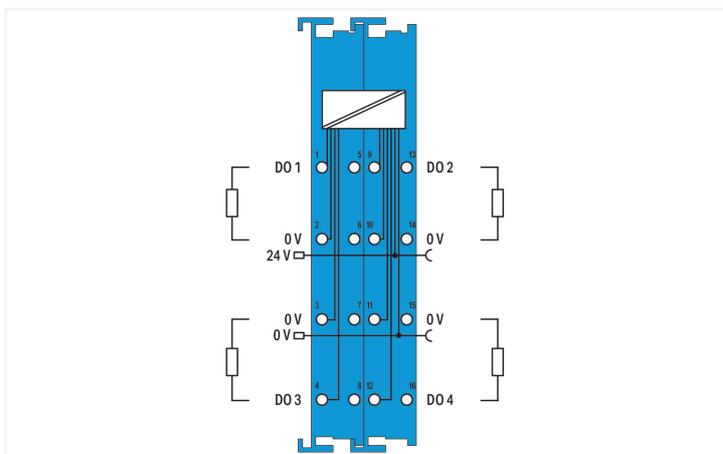
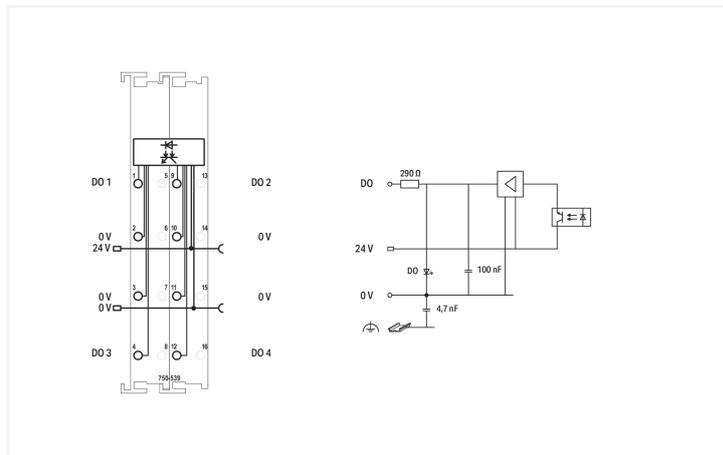


Color: ■ light blue



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 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 ! General information (e.g., installation regulations) on explosion protection is available in the WAGO I/O System 750 manuals!
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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

Technical data

Internal resistance R_i	290 Ω
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 (5 V system supply)	20 mA
Supply voltage (field)	24 VDC; (Ex i power supply: $U_o = \text{max. } 26.8 \text{ V}$); via power jumper contacts (power supply via blade contact; transmission 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	ATEX: II 3 (1) G Ex ec [ia Ga] IIC T4 Gc; II (1) D [Ex ia Da] IIIC; I (M1) [Ex ia Ma] I IECEX/INMETRO: 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)	$U_o = 27.3 \text{ V}$; $I_o = 117.5 \text{ mA}$; $P_o = 800.1 \text{ mW}$; linear characteristic curve
Reactances Ex ia IIC	$L_o = 13 \mu\text{H}$; $C_o = 88 \text{ nF}$
Reactances Ex ia IIB	$L_o = 8.1 \text{ mH}$; $C_o = 683 \text{ nF}$
Reactances Ex ia IIA	$L_o = 14 \text{ mH}$; $C_o = 2.28 \mu\text{F}$
Reactances Ex ia I	$L_o = 21 \text{ mH}$; $C_o = 540 \text{ nF}$
Reactances (note)	Reactances without accounting for the concurrence of capacitance (C_o) and inductance (L_o)

Connection data

Connection technology: inputs/outputs	8 x CAGE CLAMP®
Connectable conductor materials	Copper
Connection type	Inputs/outputs
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 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	2.035 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 ₂ S contaminant concentration at a relative humidity 75 %	10 ppm
Permissible SO ₂ 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 8.0	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	-	22-2219060
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 ia-Da] IIIC, [Ex iaMa] I)
CCC CNEX	CNCA-C23-01	2020312310000211 (Ex ec[iaGa] IIC T4 Gc, [Ex ia-Da] IIIC, [Ex iaMa] I)
IECEX TUEV Nord Cert GmbH	IEC 60079, IEC 60079-0	IECEX TUN12.0039X (Ex ec[iaGa] IIC T4 Gc, [Ex ia-Da] IIIC, [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	↓

Documentation

Manual			
Product Manual 4-Channel, 24 VDC, VAL-VE Ex i	2485615371 1 en-US 2024-12-09 14:20	pdf 3428.91 KB	↓
System Manual Series 750/753			↓

System Description		
750/753 Series I/O-System – General Product Information	pdf 953.35 KB	↓
Overview on WAGO-I/O-SYSTEM 750 approvals	pdf 770.48 KB	↓
Ex i Overview	pdf 442.07 KB	↓

Bid Text			
750-539	19.02.2019	xml 5.84 KB	↓
750-539	06.10.2017	doc 31.50 KB	↓

Instruction Leaflet			
CCC Ex (Additional information)	26.04.2023	pdf 143.96 KB	↓

CAD/CAE-Data

CAD data		CAE data	
2D/3D Models 750-539		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.: 210-508 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-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.: 210-506 Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; 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.: 210-504 Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715; 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	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

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 In-line; 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 In-line; 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 In-line; 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 In-line; 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 In-line; 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 In-line; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet	Item No.: 2009-145 Mini-WSB In-line; 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 In-line; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow

1.1.2.2 Marker



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 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