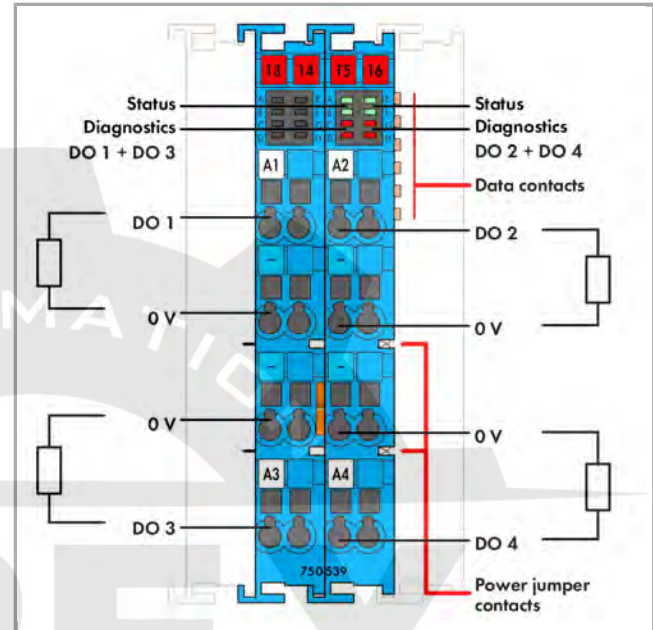


Data sheet | Item number: 750-539

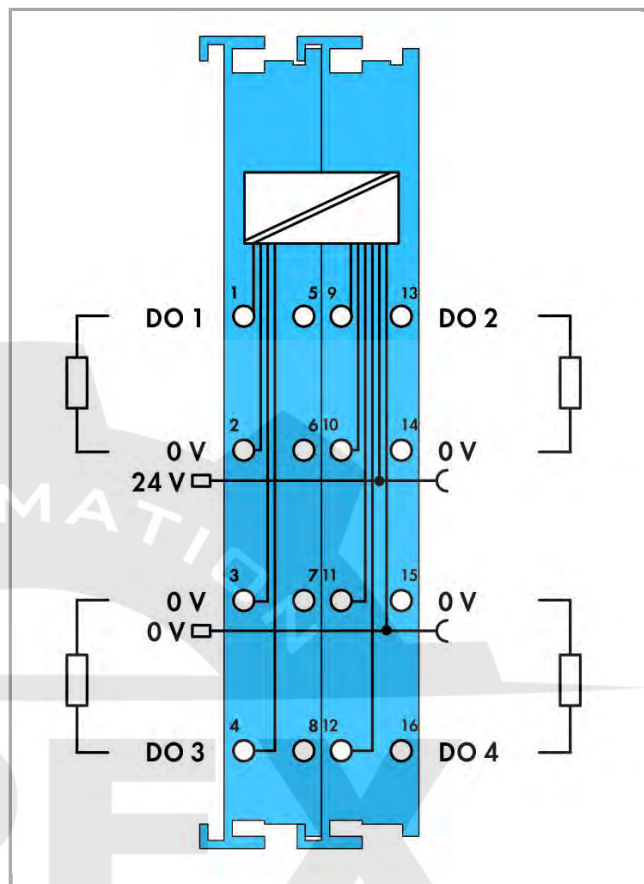
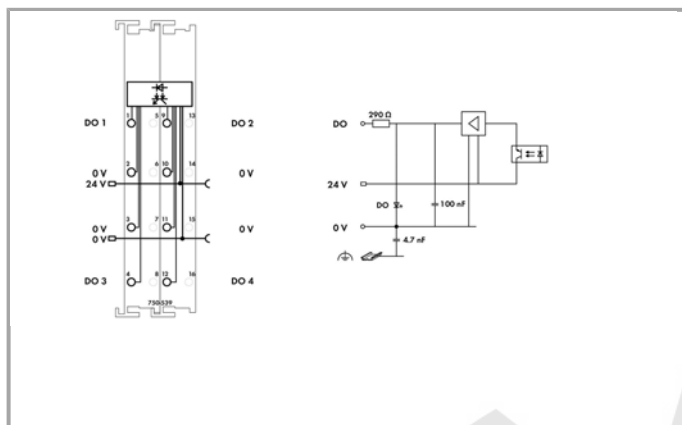
4-channel digital output; 24 VDC; valve; Intrinsically safe

750-539



RoHS Compliant

[BOMcheck.net](https://www.bomcheck.net)



Item description

The digital output module controls actuators in the hazardous areas of Zone 0+1.

Intrinsically safe valves can be directly controlled.

The WAGO 750 I/O-SYSTEM must be installed either in Zone 2 or in a non-hazardous area.

All outputs are electronically short circuit-protected.

LEDs:

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

Electrically isolated field and system levels

Note:

The digital output module must only be operated via Ex i 24VDC power supply!

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

Data

Technical Data

Number of digital outputs	4
Total number of channels (module)	4
Type of signal	Voltage
Actuator connection	4 x (2-conductor)
Output characteristic	high-side switching
Type of load	resistive, inductive, lamps
Power consumption P_{max}	4,86 W (bei Ausgangsstrom von je 47 mA)
Max input data width (internal)	4 Bit
Max output data width (internal)	4 Bit
Intrinsic safety Ex i	yes
System supply voltage	DC 5 V; via data contacts
Current consumption, system supply (5 V)	20 mA
System and sensor supply voltage	)
Field supply voltage	DC 24 V; (Versorgung über Einspeisung Ex i $U_o = \max. 27,3 \text{ V}$); über Leistungskontakte (Einspeisung über Messerkontakt; Weiterleitung über Federkontakt)
Current consumption, field supply (module with no external load)	10 mA
Isolation	300 VAC system/supply
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2
Current carrying capacity of the power jumper contacts	1 A
Ex guideline	EN/IEC 60079-0, -7, -11, -26, -31
Electric circuit, safety-relevant data	$U_o = 27,3 \text{ V}$; $I_o = 117,5 \text{ mA}$; $P_o = 800,1 \text{ mW}$; Kennlinie: Linear
Reactances Ex ia IIC	$L_o = 13 \mu\text{H}$; $C_o = 88 \text{ nF}$
Reactances Ex ia IIB	$L_o = 8,1 \text{ mH}$; $C_o = 683 \text{ nF}$
Ex ia IIA reactances	$L_o = 14 \text{ mH}$; $C_o = 2,28 \mu\text{F}$
Reactances Ex ia I	$L_o = 21 \text{ mH}$; $C_o = 540 \text{ nF}$
Reactances	Reaktanzen ohne Berücksichtigung der Gleichzeitigkeit von L und C
Marking	ATEX, IECEx, INMETRO, Underwriters Laboratories Inc.

Connection data

Connection technology: In-/Outputs	16 x CAGE CLAMP®
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 inch
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Geometrical Data

Width	24 mm
Height	67.8 mm / 2.669 inch
Height from upper-edge of DIN-35 rail	60.6 mm / 2.386 inch
Depth	100 mm / 3.937 inch

Mechanical data

Type of mounting	DIN-35 rail
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Material Data

Housing material	Polycarbonate, polyamide 6.6
Fire load	0 MJ
Weight	88.5 g
Conformity marking	1

Environmental Requirements

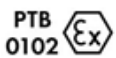
Surrounding air (operating) temperature	0 ... 55 °C
Surrounding air (storage) temperature	-40 ... 85 °C
Protection class	IP20
Degree of pollution (5)	2 per IEC 61131-2
Operating altitude	0 ... 2000 m
Mounting position	horizontal (standing/lying) or vertical
Relative air humidity (no condensation)	95 %
Vibration resistance	acc. to IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to 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

Country of origin	DE
GTIN	4055143514149
Customs Tariff No.	85371098990

Approvals / Certificates

Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV_12_ATEX_106032X
	IECEX TUEV Nord Cert GmbH	IEC 60079	IECEX TUN 12.0039X
	IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX TUN 12.0039X
	INMETRO TÜV Rheinland do Brasil Ltda.	-	TÜV_14.1911_X
	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	ANSI/ISA 12.12.01	E198726 Sec.1

Country specific Approvals

Logo	Approval	Additional Approval Text	Certificate name
	KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-DOM750

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	ABS American Bureau of Shipping	-	19-HG1821926
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAA0000194
	PRS Polski Rejestr Statków	-	TE/2236/880590/19

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Sec10

Compatible products

Marking accessories

	Item no.: 2009-145 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type		2009-145
	Item no.: 2009-145/000-002 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-002	2009-145
	Item no.: 2009-145/000-005 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-005	2009-145
	Item no.: 2009-145/000-006 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-006	2009-145
	Item no.: 2009-145/000-007 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-007	2009-145
	Item no.: 2009-145/000-012 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-012	2009-145
	Item no.: 2009-145/000-023 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-023	2009-145
	Item no.: 2009-145/000-024 Mini-WSB Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-024	2009-145
	Item no.: 248-501 Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card		248-501
	Item no.: 248-501/000-002 Mini-WSB marking card; as card; not stretchable; plain; snap-on type	/000-002	248-501



Item no.: 248-501/000-005
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-005

248-501



Item no.: 248-501/000-006
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-006

248-501



Item no.: 248-501/000-007
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-007

248-501



Item no.: 248-501/000-012
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-012

248-501



Item no.: 248-501/000-017
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-017

248-501



Item no.: 248-501/000-023
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-023

248-501



Item no.: 248-501/000-024
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

/000-024

248-501



Item no.: 750-103
Group marker carrier

750-103



Item no.: 750-107
Group marker carrier

750-107

shield connection



Item no.: 790-108
Shield clamping saddle; 11 mm wide; diameter of compatible conductor

790-108



Item no.: 790-116
Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm

790-116



Item no.: 790-124
Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm

790-124



Item no.: 790-140
Shield clamping saddle; diameter of compatible conductor

790-140



Item no.: 790-208
Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm

790-208



Item no.: 790-216
Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm

790-216



Item no.: 790-220
Shield clamping saddle; 30 mm wide; 6 ... 20 mm

790-220

Carrier rail



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

210-112

**Item no.: 210-113**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; according to EN 60715

210-113

**Item no.: 210-114**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; similar to EN 60715

210-114

**Item no.: 210-115**

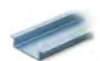
Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; according to EN 60715; "Hole width 18 mm

210-115

**Item no.: 210-118**

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715

210-118

**Item no.: 210-196**

Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslotted; similar to EN 60715

210-196

**Item no.: 210-197**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; similar to EN 60715

210-197

**Item no.: 210-198**

Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslotted; according to EN 60715

210-198

**Item no.: 210-504**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715

210-504

**Item no.: 210-505**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715

210-505

**Item no.: 210-506**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715

210-506

**Item no.: 210-508**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715

210-508

Supply module**Item no.: 750-606**

Power Supply; 24 VDC; Diagnostics; Intrinsically safe

750-606

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

Power Supply; 24 VDC; Intrinsically safe

750-625

/000-001

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Disposal; Electrical and electronic equipment, Packaging

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Overview on WAGO-I/O-SYSTEM 750 approvals

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Basic conditions and recommendations for higher operational safety

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Use in Hazardous Environments

Term definition, marking and installation regulations

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