



The 750-632 Proportional Valve Module controls two single-coil valves with up to 24 V/1.6 A or one valve with up to 24 V/2 A. The module features two current-controlled PWM\* outputs with adjustable dithering.

Both unipolar and bipolar valve control are possible. Additionally, operation of a valve with two unipolar coils is also provided. The module is single-channel in this operating mode! Characteristic curve adaptations, such as zero offset, dual gain compensation or range limitations, can be adjusted via parameters.

Scaling and configurable up/down ramps permit set point adjustment to the application. For example, monitoring threshold value switches is performed via two additional digital inputs. Start-up and valve parameters adjustment are performed via WAGO-I/O-CHECK software or the controller.

\*PWM = Pulse width modulation

### Technical data

Number of digital inputs	2
Number of outputs	2 bipolar outputs (A+, A- and B+, B-)
Type of output	H-bridge output with current-regulated PWM output (short-circuit-proof and thermal overload-proof for each channel)
Input characteristic	high-side switching Type 1
Input current (typ.)	2.7 mA at 24 V
Output current	1-channel operation: 2 A; 2-channel operation: 1.6 A per channel
Load type	Operating range: inductive (1 mH ... 600 mH); Internal load resistance (
PWM frequency (typ.)	50 kHz
Data width	6 bytes: single-channel operating mode; 12 bytes: dual-channel operating mode
Supply voltage (system)	5 VDC; via data contacts
Current consumption (5 V system supply)	125 mA
Supply voltage (field)	24 VDC (-25 ... +30 %); via power jumper contacts (power supply via blade contact; transmission via spring contact)
Current consumption, field supply (module with no external load)	20 mA
Isolation	500 V system/field
Number of incoming power jumper contacts	2
Number of outgoing power jumper contacts	2

### Connection data

Connection technology: inputs/outputs	16 x Push-in CAGE CLAMP®
Connection type 1	Inputs/outputs
Solid conductor	0.08 ... 1.5 mm <sup>2</sup> / 28 ... 16 AWG
Fine-stranded conductor	0.25 ... 1.5 mm <sup>2</sup> / 22 ... 16 AWG
Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
Connection requirement (permissible cable length)	30 m
Connection requirement (permissible cable type)	Outputs
Conductor type (1)	f-st
Conductor type (2)	s
Conductor type 1	fine-stranded
Conductor type 2	solid
Note (conductor cross-section)	Coil connections A+/A-/B+/B-: 1.5 mm <sup>2</sup> /16 AWG; For use according to UL 508: 16 AWG for all connections

### Physical data

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

### Mechanical data

Mounting type	DIN-35 rail
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### Material data

Color	light gray
Housing material	Polycarbonate; polyamide 6.6
Fire load	0.824 MJ
Weight	54.4 g
Conformity marking	CE

### Environmental requirements

Ambient temperature (operation)	0 ... +55 °C
Surrounding air temperature (storage)	-25 ... +85 °C
Protection type	IP20
Pollution degree (5)	2 per IEC 61131-2
Operating altitude	0 ... 2000 m / 0 ... 6562 ft
Mounting position	horizontal (standing/lying); vertical
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 61000-6-4, 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

Product Group	15 (Remote I/O)
eCl@ss 10.0	27-24-26-05
eCl@ss 9.0	27-24-26-05
ETIM 8.0	EC001601
ETIM 7.0	EC001601
PU (SPU)	1 Stück
Packaging type	Box
Country of origin VKOrg Germany	DE
GTIN	4050821782346
Customs tariff number VKOrg Germany	85389099990

### Approvals and certificates

#### Ex-Approvals



Approval	Standard	Certificate name
ATEX TUEV Nord Cert GmbH	EN 60079-0	
CCCEX CQST/CNEX	CNCA-C23-01	2020312310000213 (Ex nA IIC T4 Gc)
EAC Brjansker Zertifizierungsstelle	TP TC 012/2011	EAC RU C-DE.AM02. B.00163/19 (2Ex e IIC T4 Gc X)
IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX_TUN_14.0035_X (Ex ec IIC T4 Gc)
INMETRO TÜV Rheinland do Brasil Ltda.	IEC 60079-0	BR-Ex_TÜV 12.1297 X

#### Ex-Approvals

UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726 Sec.1
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Country specific Approvals



Approval	Standard	Certificate name
EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC RU C-DE.AM02. B.00087/19
KC National Radio Research Agency	Article 58-2, Clause 3	MSIP-REM-W43-PVM750

Ship Approvals



Approval	Standard	Certificate name
ABS American Bureau of Ship- ping	-	22-2219060
BSH Bundesamt fuer See- schifffahrt und Hydrogra- phie	-	1104
DNV DNV Germany GmbH	DNV-CG-0339, Aug.2021	TAA0000194
KR Korean Register of Ship- ping	-	KR HMB05880-AC001
PRS Polski Rejestr Statków	-	TE/2236/880590/19
RINA RINA Germany GmbH	-	ELE343521XG001

UL-Approvals



Approval	Standard	Certificate name
UL Underwriters Laboratories Inc. (ORDINARY LOCATI- ONS)	UL 508	E175199 Sec.1

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 750-632 <a href="#">↓</a>

Documentation

Manual			
System Manual WAGO I/O System 750 / 753	V 3.1.0 11.05.2022	pdf 8495.90 KB	<a href="#">↓</a>
Proportional Valve Mo- dule	V 1.3.0	pdf 7020.03 KB	<a href="#">↓</a>
System Manual Series 750/753			<a href="#">↓</a>

System Description			
750/753 Series I/O- System – General Pro- duct Information		pdf 953.35 KB	<a href="#">↓</a>
Overview on WAGO-I/ O-SYSTEM 750 appro- vals		pdf 770.48 KB	<a href="#">↓</a>
Use in Hazardous Envi- ronments	V 1.0.0	pdf 1007.06 KB	<a href="#">↓</a>

## Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 259.56 KB	<a href="#">↓</a>
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## Bid Text

750-632	19.02.2019	xml 6.28 KB	<a href="#">↓</a>
750-632	09.10.2017	doc 30.00 KB	<a href="#">↓</a>

## Application Notes

## Application Note CoDeSys 2.3

CoDeSys V2.3 function blocks for the solenoid module 750-632 (a500530)	V1.0.0 17.09.2015	zip 615.63 KB	<a href="#">↓</a>
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## Application Note e!COCKPIT

e!COCKPIT Application Note WagoAppSoleno-id	1.0.1 06.12.2021	pdf 555.15 KB	<a href="#">↓</a>
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## Application note SIEMENS

Proportional Valve Module 750-632 And TIA (a500431)	1.1.0 05.01.2021	zip 3268.77 KB	<a href="#">↓</a>
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## CAD/CAE-Data

## CAD data

2D/3D Models 750-632	<a href="#">↓</a>
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## CAE data

EPLAN Data Portal 750-632	<a href="#">↓</a>
WSCAD Universe 750-632	<a href="#">↓</a>
ZUKEN Portal 750-632	<a href="#">↓</a>

## Libraries

## Library

Function blocks supporting valve module 750-632	1.0.4 05.04.2016	zip 969.96 KB	<a href="#">↓</a>
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