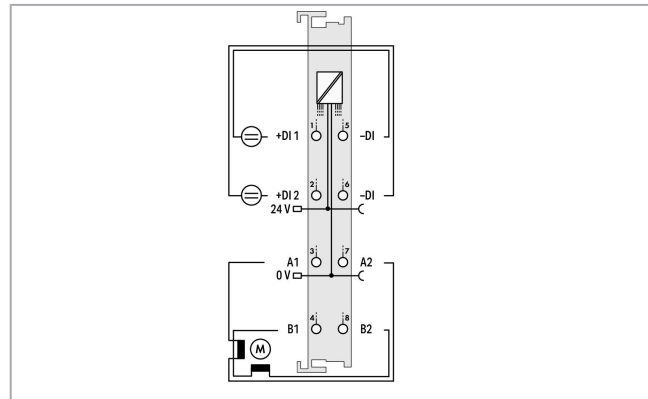
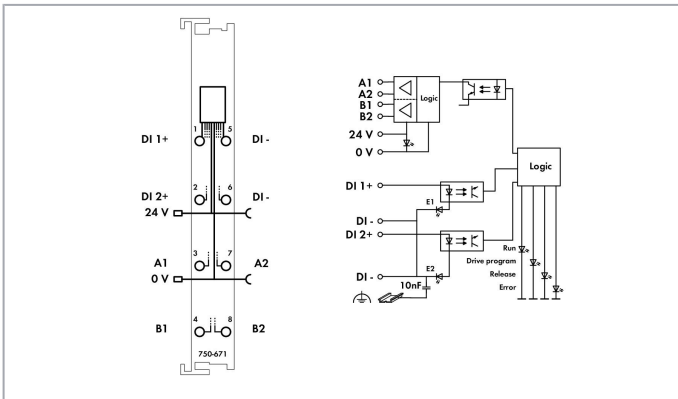
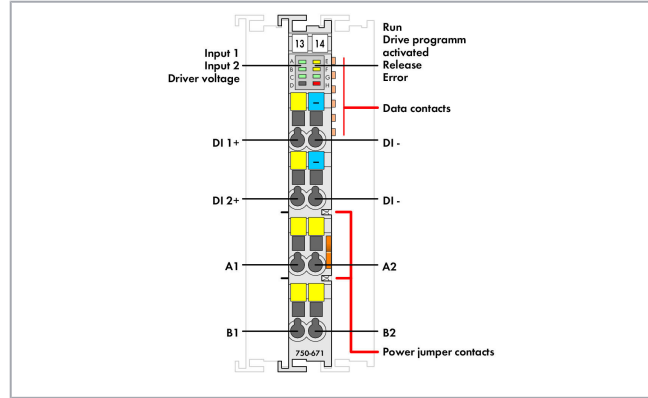
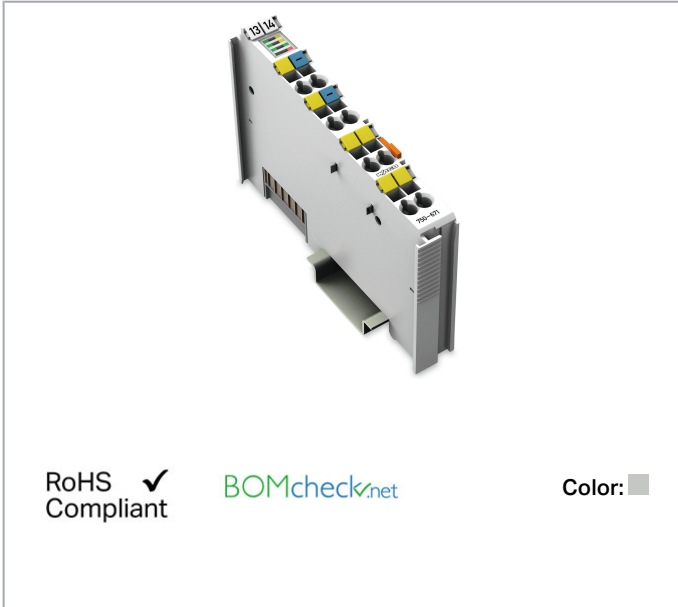


**Data sheet | Item number: 750-671**  
**Stepper Controller; 24 VDC; 1.5 A; light gray**

[www.wago.com/750-671](http://www.wago.com/750-671)



**Item description**

The 750-671 Module is an intelligent stepper controller with on-board power driver designed to control two-phase stepper motors up to 24 V/1.5 A. The 64 times microstepping prevents step losses due to resonance in the acceleration phases and reduces wear on the mechanical parts. Adjustable current limits for stop, acceleration and constant speed help minimize motor power dissipation. Two configurable inputs for start/stop, limit switches, reference cams, jog/tip, etc., are directly processed by the internal software without delay.

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

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Versatile functions, such as positioning with different acceleration slopes, command tables, camshaft controller, auto referencing and other event-dependent properties provide this controller with a wide spectrum of possible uses.

The programmer's interface is the same for all WAGO Stepper Controllers.

## Data

### Technical data

Device-specific	Operating modes: Individual positioning, reference run, jog, tip, command tables
Number of digital inputs	2
Number of outputs	1 stepper motor (2 phases/bipolar)
Input filter	100 µs, software filter can be connected
Input current (typ.)	2.8 mA
Output current (max.) (motor)	Up to 2 x 1.5 A peak value; 1 A rms
Voltage range for signal (0)	-3 ... +5 VDC
Voltage range for signal (1)	15 ... 30 VDC
Resolution	15 bits + 16 bit prescaler
Stepper resolution	23 bits + sign bit
Full-step stepper frequency (max.)	7,812 Hz
Microstepping	64 steps
Data width	12-byte input/output
Functions	Absolute/relative positioning, setpoint change on the fly, rotary axis, etc.
Supply voltage (system)	DC 5 V; via data contacts
Power consumption (5 V system supply)	85 mA
Supply voltage (field)	DC 24 V (-25 ... +30 %); via power jumper contacts (power supply via blade contact; transmission via spring contact)
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	8 x CAGE CLAMP®
Connection type (1)	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 inch

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



## Physical data

Width	12 mm / 0.472 inch
Height	100 mm / 3.937 inch
Depth	67.8 mm / 2.669 inch
Depth from upper edge of DIN-rail	60.6 mm / 2.386 inch

## Mechanical data

Mounting type	DIN-35 rail
---------------	-------------

## Material data

Color	light gray
Housing material	Polycarbonate, polyamide 6.6
Fire load	0.869 MJ
Weight	51.8 g
Conformity marking	CE

## Environmental requirements

Surrounding air temperature (operation)	0 ... 55 °C
Surrounding air temperature (storage)	-40 ... 85 °C
Protection type	IP20
Pollution degree (5)	2 per IEC 61131-2
Operating altitude	0 ... 2000 m
Mounting position	horizontal (standing/lying); vertical
Relative humidity (without condensation)	95 %
Vibration resistance	per IEC 60068-2-6
Shock resistance	15g per IEC 60068-2-27
EMC immunity to interference	per EN 61000-6-2
EMC emission of interference	per EN 61000-6-3
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)
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Subject to changes. Please also observe the further product documentation!

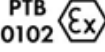


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Packaging type	BOX
Country of origin	DE
GTIN	4045454853310
Customs tariff number	85389099990








## Approvals / Certificates

### Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	<b>ATEX</b> TUEV Nord Cert GmbH	EN 60079-0	TÜV 07 ATEX 554086 X en.
 Ex nA IIC T4 Gc	<b>CCCEx</b> CQST/CNEx	CNCA-C23-01	2020312310000215
	<b>TUEV Nord</b> TUEV Nord Cert GmbH	IEC 60079-0	IECEX TUN 09.0001 X
















## Compatible products

### shield connection

	<b>Item no.: 790-108</b> Shield clamping saddle; 11 mm wide; diameter of compatible conductor; 3 ... 8 mm	<a href="http://www.wago.com/790-108">www.wago.com/790-108</a>
	<b>Item no.: 790-116</b> Shield clamping saddle; 19 mm wide; diameter of compatible conductor; 7 ... 16 mm	<a href="http://www.wago.com/790-116">www.wago.com/790-116</a>
	<b>Item no.: 790-124</b> Shield clamping saddle; 27 mm wide; diameter of compatible conductor; 6 ... 24 mm	<a href="http://www.wago.com/790-124">www.wago.com/790-124</a>
	<b>Item no.: 790-140</b> Shield clamping saddle; diameter of compatible conductor	<a href="http://www.wago.com/790-140">www.wago.com/790-140</a>
	<b>Item no.: 790-208</b> Shield clamping saddle; 12.4 mm wide; 3 ... 8 mm	<a href="http://www.wago.com/790-208">www.wago.com/790-208</a>
	<b>Item no.: 790-216</b> Shield clamping saddle; 21.8 mm wide; 6 ... 16 mm	<a href="http://www.wago.com/790-216">www.wago.com/790-216</a>
	<b>Item no.: 790-220</b> Shield clamping saddle; 30 mm wide; 6 ... 20 mm	<a href="http://www.wago.com/790-220">www.wago.com/790-220</a>

### system box

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

	<b>Item no.: 850-804</b> IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 4 x M20, 16 x M16, 28 x M12 cable grip	<a href="http://www.wago.com/850-804">www.wago.com/850-804</a>
	<b>Item no.: 850-804/000-001</b> IP65 enclosure; Stainless steel; WxHxD (400x123x200 mm); 2 x M20, 13 x M16, 32 x M12 cable grip	<a href="http://www.wago.com/850-804/000-001">www.wago.com/850-804/000-001</a>
	<b>Item no.: 850-805</b> IP65 enclosure; Stainless steel; WxHxD (600x123x200 mm); 4 x M20, 19 x M16, 67 x M12 cable grip	<a href="http://www.wago.com/850-805">www.wago.com/850-805</a>
	<b>Item no.: 850-814/002-000</b> IP65 enclosure; Sheet steel (RAL 7035); WxHxD (200x120x200 mm); without flange plate	<a href="http://www.wago.com/850-814/002-000">www.wago.com/850-814/002-000</a>
	<b>Item no.: 850-815/002-000</b> IP65 enclosure; Sheet steel (RAL 7035); WxHxD (300x120x200 mm); without flange plate	<a href="http://www.wago.com/850-815/002-000">www.wago.com/850-815/002-000</a>
	<b>Item no.: 850-816/002-000</b> IP65 enclosure; Sheet steel (RAL 7035); WxHxD (400x120x200 mm); without flange plate	<a href="http://www.wago.com/850-816/002-000">www.wago.com/850-816/002-000</a>
	<b>Item no.: 850-817/002-000</b> IP65 enclosure; Sheet steel (RAL 7035); WxHxD (600x120x200 mm); without flange plate	<a href="http://www.wago.com/850-817/002-000">www.wago.com/850-817/002-000</a>
	<b>Item no.: 850-825</b> IP65 enclosure; Aluminium (RAL 7032); WxHxD (160x100x160 mm); 9 x M12, 4 x M20	<a href="http://www.wago.com/850-825">www.wago.com/850-825</a>
	<b>Item no.: 850-826</b> IP65 enclosure; Aluminium (RAL 7032); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	<a href="http://www.wago.com/850-826">www.wago.com/850-826</a>
	<b>Item no.: 850-826/002-000</b> IP65 enclosure; Aluminium (RAL 7035); WxHxD (240x100x160 mm); 4 x M20, 4 x M16, 14 x M12 cable grip	<a href="http://www.wago.com/850-826/002-000">www.wago.com/850-826/002-000</a>
	<b>Item no.: 850-827</b> IP65 enclosure; Aluminium (RAL 7032); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	<a href="http://www.wago.com/850-827">www.wago.com/850-827</a>
	<b>Item no.: 850-827/002-000</b> IP65 enclosure; Aluminium (RAL 7035); WxHxD (320x100x160 mm); 4 x M20, 8 x M16, 17 x M12 cable grip	<a href="http://www.wago.com/850-827/002-000">www.wago.com/850-827/002-000</a>
	<b>Item no.: 850-828</b> IP65 enclosure; Aluminium (RAL 7032); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip	<a href="http://www.wago.com/850-828">www.wago.com/850-828</a>
	<b>Item no.: 850-828/002-000</b> IP65 enclosure; Aluminium (RAL 7035); WxHxD (480x100x160 mm); 4 x M20, 10 x M16, 35 x M12 cable grip	<a href="http://www.wago.com/850-828/002-000">www.wago.com/850-828/002-000</a>
	<b>Item no.: 850-834</b> IP65 enclosure; Polyester (RAL 7032); WxHxD (164x100x164 mm); 9 x M12, 4 x M20	<a href="http://www.wago.com/850-834">www.wago.com/850-834</a>

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



**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)



**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)

**Marking accessories**



**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.: 2009-145/000-005**

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.: 2009-145/000-006**

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.: 2009-145/000-007**

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.: 2009-145/000-012**

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**

Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card

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



**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)



**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.: 248-501/000-006**

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)

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**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.: 248-501/000-012**  
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.: 248-501/000-017**  
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.: 248-501/000-023**  
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)



**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.: 750-103**  
Group marker carrier; transparent

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



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

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

#### 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; 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

[www.wago.com/210-113](http://www.wago.com/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; silver-colored

[www.wago.com/210-114](http://www.wago.com/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; 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

[www.wago.com/210-118](http://www.wago.com/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; silver-colored

[www.wago.com/210-196](http://www.wago.com/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; silver-colored

[www.wago.com/210-197](http://www.wago.com/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; copper-colored

[www.wago.com/210-198](http://www.wago.com/210-198)

**Item no.: 210-504**

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

	Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slotted; galvanized; according to EN 60715	<a href="http://www.wago.com/210-504">www.wago.com/210-504</a>
	<b>Item no.: 210-505</b> Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslotted; galvanized; according to EN 60715; silver-colored	<a href="http://www.wago.com/210-505">www.wago.com/210-505</a>
	<b>Item no.: 210-506</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslotted; galvanized; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-506">www.wago.com/210-506</a>
	<b>Item no.: 210-508</b> Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slotted; galvanized; similar to EN 60715; silver-colored	<a href="http://www.wago.com/210-508">www.wago.com/210-508</a>
<b>Supply module</b>		
	<b>Item no.: 750-601</b> Power Supply; 24 VDC; fuse holder; light gray	<a href="http://www.wago.com/750-601">www.wago.com/750-601</a>
	<b>Item no.: 750-602</b> Power Supply; 24 VDC; light gray	<a href="http://www.wago.com/750-602">www.wago.com/750-602</a>
	<b>Item no.: 750-610</b> Power Supply; 24 VDC; fuse holder; Diagnostics	<a href="http://www.wago.com/750-610">www.wago.com/750-610</a>
	<b>Item no.: 750-612</b> Power Supply; 0 ... 230 V AC/DC; light gray	<a href="http://www.wago.com/750-612">www.wago.com/750-612</a>

## Downloads

### Documentation

#### Manual

Stepper controller 24V / 1.5A	V 1.0.2	pdf 2.2 MB	Download
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#### Bid Text

750-671 X81 - Datei	19-Feb-2019	xml 5.9 kB	Download
750-671 doc - Datei	09-Oct-2017	doc 29.2 kB	Download

#### Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
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#### System Description

750/753 Series I/O-System – General Product Information

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

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750/753 Series I/O-System - General Product Information		pdf 1.7 MB	Download
Overview on WAGO-I/O-SYSTEM 750 approvals		pdf 780.2 kB	Download
Use in Hazardous Environments Term definition, marking and installation regulations	V 1.0.0	pdf 1.0 MB	Download

## Application Notes

### Application note SIEMENS

Benutzung der Stepper Module 750-670,750-671,750-672,750-673 mit Siemens Step 7 (a114903) Dieser Anwendungshinweis beschreibt die Bausteine, die zur Nutzung der verschiedenen Stepper Module bereitgestellt werden.	V1.1.0 03-Feb-2017	zip 8.9 MB	Download
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### Application Note CoDeSys 2.3

Nutzung der Bibliothek Stepper_02 für die Module 750-670,750-671 (a114900) Dieser Anwendungshinweis zeigt auf, wie mit der Bibliothek Stepper_02.lib grundlegende Funktionen der Stepperklemmen 750-670 und 750-671 genutzt werden können.	V1.0.3 25-Feb-2008	zip 3.9 MB	Download
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### Application Note e!COCKPIT

e!COCKPIT Application Note WagoAppStepper In this Application Note, several example projects for the library "WagoAppStepper" are described.	1.0.0 27-Nov-2020	pdf 3.4 MB	Download
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## Libraries

### Library

Function blocks for the stepper modules 750-670 and 750-671 Function blocks for the stepper modules 750-670 and 750-671.	V1.0.5 03-Jan-2007	zip 886.1 kB	Download
Function blocks for the stepper modules 750-670,750-671,750-672,750-673 Function blocks for the stepper modules 750-670,750-671,750-672,750-673.	V1.0.5 29-May-2017	zip 601.7 kB	Download

## CAD/CAE-Data

### CAD data

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



2D/3D Models 750-671

[URL](#) [Download](#)

#### CAE data

EPLAN Data Portal 750-671

[URL](#) [Download](#)

WSCAD Universe 750-671

[URL](#) [Download](#)

ZUKEN Portal 750-671

[URL](#) [Download](#)

#### Device Files

##### Device Driver

WAGO USB Service Kabel Treiber / Serie 750 und 857

6.5.3.0  
10-Sep-2014

zip  
4.8 MB

[Download](#)

#### Installation Notes

#### Product family

**750/753 Series – I/O System**

[Show all products from the family](#)

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