

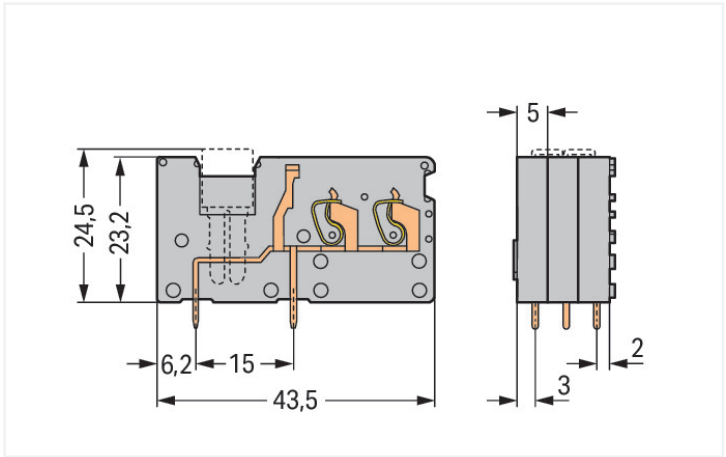
Data Sheet | Item Number: 742-171

Stackable 2-conductor PCB terminal block; with commoning option; 2.5 mm²; Pin spacing 5 mm; 1-pole; CAGE CLAMP®; gray

<https://www.wago.com/742-171>



Color: ■ gray



Dimensions in mm

PCB terminal block, 742 Series, 90 °conductor entry to board

Quick and easy connections are guaranteed with this PCB terminal block (item number 742-171). It is a universal connector that can be used practically anywhere, for example, as a pluggable PCB connector, panel feedthrough header, connector for rail-mount terminal blocks, or a floating connector for different mounting methods. Conductors can only be connected to this PCB terminal block if their strip length is between 6 and 7 mm . Featuring one conductor terminal along with CAGE CLAMP®, this connector outperforms the competition. Our CAGE CLAMP® connection provides a secure and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. Dimensions: (7 x 27.2 x 43.5) mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.08 mm² to 2.5 mm².

The contact surface is coated with tin. An operating tool is used to operate this PCB terminal block. THT is used to solder the PCB terminal block. Insert the conductor at a 90° angle..

Electrical data				
Ratings per		IEC/EN 60664-1		
Overvoltage category		III	III	II
Pollution degree		3	2	2
Nominal voltage		320 V	320 V	630 V
Rated impulse withstand voltage		4 kV	4 kV	4 kV
Rated current		16 A	16 A	16 A
Approvals per		UL 1059		
Use group		B	C	D
Rated voltage		300 V	-	300 V
Rated current		10 A	-	10 A

Approvals per		CSA		
Use group		B	C	D
Rated voltage		300 V	-	300 V
Rated current		10 A	-	10 A



Connection Data																						
Clamping units	2	Connection 1 <table><tr><td>Connection technology</td><td>CAGE CLAMP®</td></tr><tr><td>Actuation type</td><td>Operating tool</td></tr><tr><td>Solid conductor</td><td>0.08 ... 2.5 mm² / 28 ... 12 AWG</td></tr><tr><td>Fine-stranded conductor</td><td>0.08 ... 2.5 mm² / 28 ... 12 AWG</td></tr><tr><td>Fine-stranded conductor; with insulated ferrule</td><td>0.25 ... 1.5 mm²</td></tr><tr><td>Fine-stranded conductor; with uninsulated ferrule</td><td>0.25 ... 1.5 mm²</td></tr><tr><td>Note (conductor cross-section)</td><td>12 AWG: THHN, THWN</td></tr><tr><td>Strip length</td><td>6 ... 7 mm / 0.24 ... 0.28 inches</td></tr><tr><td>Conductor connection direction to PCB</td><td>90 °</td></tr><tr><td>Pole number</td><td>1</td></tr></table>	Connection technology	CAGE CLAMP®	Actuation type	Operating tool	Solid conductor	0.08 ... 2.5 mm² / 28 ... 12 AWG	Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 12 AWG	Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm²	Fine-stranded conductor; with uninsulated ferrule	0.25 ... 1.5 mm²	Note (conductor cross-section)	12 AWG: THHN, THWN	Strip length	6 ... 7 mm / 0.24 ... 0.28 inches	Conductor connection direction to PCB	90 °	Pole number	1
Connection technology	CAGE CLAMP®																					
Actuation type	Operating tool																					
Solid conductor	0.08 ... 2.5 mm² / 28 ... 12 AWG																					
Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 12 AWG																					
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm²																					
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 1.5 mm²																					
Note (conductor cross-section)	12 AWG: THHN, THWN																					
Strip length	6 ... 7 mm / 0.24 ... 0.28 inches																					
Conductor connection direction to PCB	90 °																					
Pole number	1																					
Total number of potentials	1																					
Number of connection types	1																					
Number of levels	1																					
Number of jumper slots	1																					

Physical data		
Pin spacing	Pin spacing	5 mm / 0.197 inches
Width	Width	7 mm / 0.276 inches
Height	Height	27.2 mm / 1.071 inches
Height from the surface	Height from the surface	23.2 mm / 0.913 inches
Depth	Depth	43.5 mm / 1.713 inches
Solder pin length	Solder pin length	4 mm
Solder pin dimensions	Solder pin dimensions	1 x 0.8 mm
!	!	1.4 ^(+0.1) mm

PCB contact		
PCB contact	PCB contact	THT
Solder pin arrangement	Solder pin arrangement	within the terminal block (in-line)
Number of solder pins per potential	Number of solder pins per potential	2

Material data		
Note (material data)	Note (material data)	Information on material specifications can be found here
Color	Color	gray
Material group	Material group	I
Insulation material (main housing)	Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	Flammability class per UL94	V0
Clamping spring material	Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Contact material	Electrolytic copper (E _{Cu})
Contact Plating	Contact Plating	Tin
Fire load	Fire load	0.08 MJ
Weight	Weight	4.7 g



Environmental requirements	
Limit temperature range	-60 ... +105 °C

Commercial data	
Product Group	4 (Printed Circuit Connectors)
PU (SPU)	200 pcs
Packaging type	Box
Country of origin	CH
GTIN	4044918472999
Customs tariff number	85369010000

Product Classification	
UNSPSC	39121409
eCl@ss 10.0	27-44-04-01
eCl@ss 9.0	27-44-04-01
ETIM 9.0	EC002643
ETIM 10.0	EC002643
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

General approvals		Declarations of conformity and manufacturer's declarations
Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947-7-4	NTR NL 7813
CCA DEKRA Certification B.V.	EN 60947-7-4	71-112655
CSA DEKRA Certification B.V.	C22.2 No. 158	1711139
UR Underwriters Laboratories Inc.	UL 1059	E45172
		Approval
		EU-Declaration of Confor- mity WAGO GmbH & Co. KG
		UK-Declaration of Confor- mity WAGO GmbH & Co. KG

Approvals for marine applications

Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	24-0095975-PDA
BV Bureau Veritas S.A.	IEC 60998	11915/E0 BV
DNV DNV GL SE	-	TAE000016Z



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 742-171

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Documentation

Additional Information

Technical Section

03.04.2019

pdf

2027.26 KB

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CAD/CAE-Data

CAD data

2D/3D Models 742-171

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CAE data

EPLAN Data Portal 742-171

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ZUKEN Portal 742-171

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PCB Design

Symbol and Footprint via SamacSys 742-171

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Symbol and Footprint via Ultra Librarian 742-171

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1 Compatible Products

1.1 Required Accessories

1.1.1 End plate

1.1.1.1 End plate



[Item No.: 742-450](#)
End plate; snap-fit type; 1.5 mm thick; blue



[Item No.: 742-150](#)
End plate; snap-fit type; 1.5 mm thick; gray



[Item No.: 742-850](#)
End plate; snap-fit type; 1.5 mm thick; green-yellow



1.1.2 Jumper

1.1.2.1 Jumper



[Item No.: 280-402](#)
Jumper; insulated; gray

1.2 Optional Accessories

1.2.1 Ferrule

1.2.1.1 Ferrule



[Item No.: 216-321](#)
Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow



[Item No.: 216-131](#)
Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored



[Item No.: 216-322](#)
Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise



[Item No.: 216-132](#)
Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated



[Item No.: 216-241](#)
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white



[Item No.: 216-221](#)
Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white



[Item No.: 216-141](#)
Ferrule; Sleeve for 0.5 mm² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



[Item No.: 216-121](#)
Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored



[Item No.: 216-242](#)
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



[Item No.: 216-262](#)
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray



[Item No.: 216-222](#)
Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray



[Item No.: 216-142](#)
Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



[Item No.: 216-122](#)
Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored



[Item No.: 216-243](#)
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



[Item No.: 216-263](#)
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red



[Item No.: 216-223](#)
Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red



[Item No.: 216-143](#)
Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92



[Item No.: 216-123](#)
Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; silver-colored



[Item No.: 216-224](#)
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black



[Item No.: 216-244](#)
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



[Item No.: 216-264](#)
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



[Item No.: 216-284](#)
Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black



[Item No.: 216-124](#)
Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated



[Item No.: 216-144](#)
Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored



1.2.2 Marking

1.2.2.1 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
 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			

1.2.3 Test and measurement

1.2.3.1 Testing accessories

 Item No.: 210-136 Test plug; 2 mm Ø; with 500 mm cable; red
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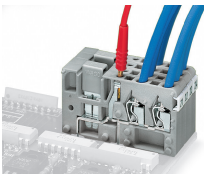
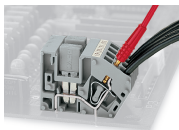
1.2.4 Tool

1.2.4.1 Operating tool

 Item No.: 210-720 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured	 Item No.: 210-657 Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured
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Installation Notes

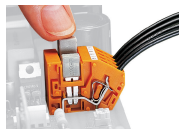
Testing



Testing – disconnect/test terminal block
Testing all types of terminal blocks via 2 mm or 2.3 mm Ø test plugs.

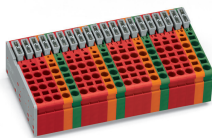
Testing – disconnect/test terminal block
Testing all types of terminal blocks via 2 mm or 2.3 mm Ø test plugs.

Commoning

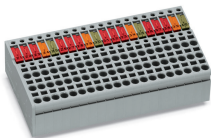


Commoning with adjacent jumpers.
Push jumper down until fully inserted.

Application



Mixed-color terminal strips are available upon request.



Mixed-color knife disconnect/test terminal strips are available upon request.



Custom terminal strips are available upon request.