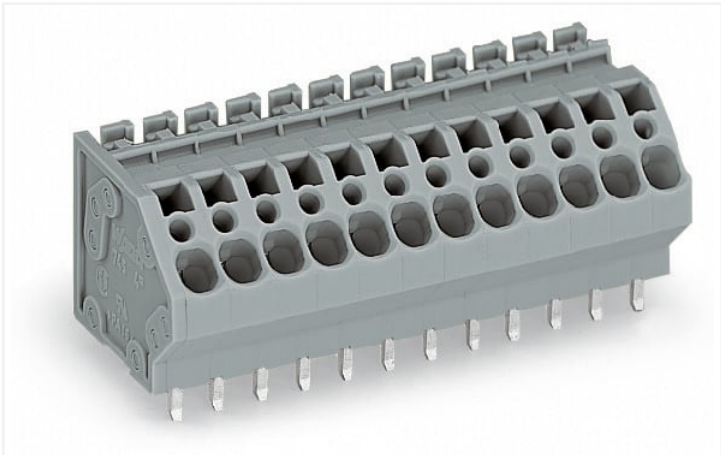


Data Sheet | Item Number: 745-102

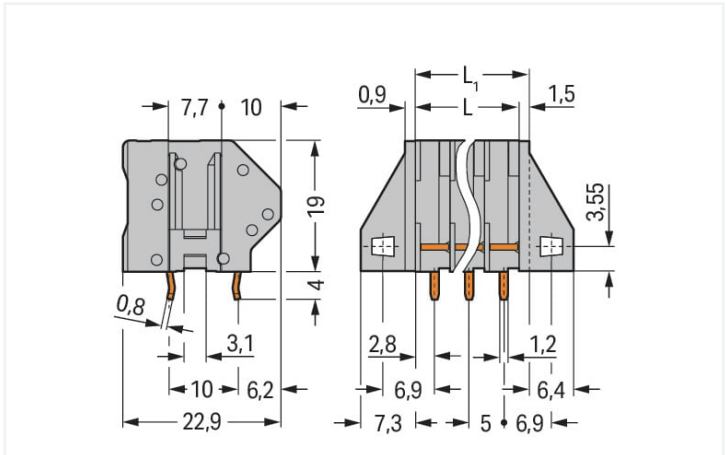
PCB terminal block; 4 mm²; Pin spacing 5 mm; 2-pole; CAGE CLAMP®; commoning option; 4,00 mm²; gray

<https://www.wago.com/745-102>

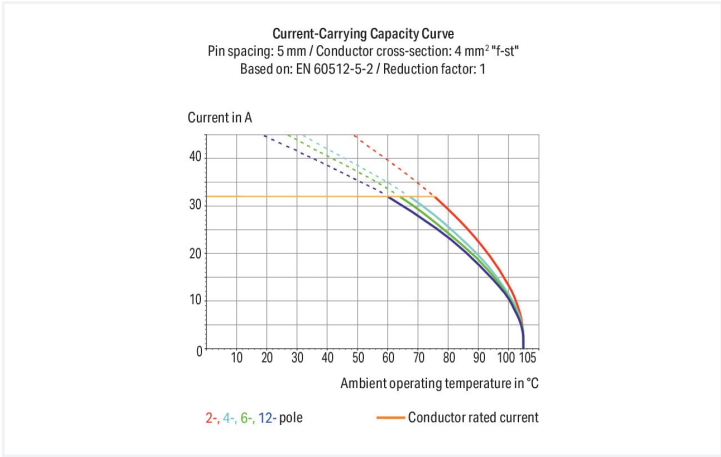


Color: ■ gray

Similar to illustration



Dimensions in mm  
L = (pole no. - 1) x pin spacing + 5 mm  
L1 = L + 1.5 mm  $\Delta$  version without mounting flange



- PCB terminal strips with screwdriver-actuated CAGE CLAMP® connection
- Versions with Ex approval
- Common and distribute potentials via comb-style jumper bars
- Double solder pins for high mechanical stability
- Custom color combinations
- Integrated testing tap
- Marker slot for Mini-WSB markers

Notes	
Variants:	Versions for Ex e II and Ex i Other colors Mixed-color PCB connector strips Versions with mounting flanges Direct marking Other versions (or variants) can be requested from WAGO Sales or configured at <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> . Other pole numbers



Electrical data

Ratings per IEC/EN 60664-1				Approvals per UL 1059			
Overvoltage category	III	III	II	Use group	B	C	D
Pollution degree	3	2	2	Rated voltage	300 V	-	300 V
Nominal voltage	320 V	320 V	630 V	Rated current	20 A	-	10 A
Rated surge voltage	4 kV	4 kV	4 kV				
Rated current	32 A	32 A	32 A				

Approvals per CSA			
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	20 A	-	10 A

Connection data

Connection points	2	Connection 1	
Total number of potentials	2	Connection technology	CAGE CLAMP®
Number of connection types	1	Actuation type	Operating tool
Number of levels	1	Solid conductor	0.08 ... 4 mm² / 28 ... 12 AWG
Number of jumper slots	1	Fine-stranded conductor	0.08 ... 4 mm² / 28 ... 12 AWG
		Fine-stranded conductor; with insulated ferrule	0.25 ... 2.5 mm²
		Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm²
		Strip length	8 ... 9 mm / 0.31 ... 0.35 inches
		Conductor connection direction to PCB	45 °
		Pole number	2

Physical data

Pin spacing	5 mm / 0.197 inches
Width	11.5 mm / 0.453 inches
Height	23 mm / 0.906 inches
Height from the surface	19 mm / 0.748 inches
Depth	22.9 mm / 0.902 inches
Solder pin length	4 mm
Solder pin dimensions	0.8 x 1.2 mm
Drilled hole diameter with tolerance	1.5 (+0.1) mm

PCB contact

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



Material data		
Note (material data)		<a href="#">Information on material specifications can be found here</a>
Color	gray	
Material group	I	
Insulation material	Polyamide (PA66)	
Flammability class per UL94	V0	
Clamping spring material	Chrome-nickel spring steel (CrNi)	
Contact material	Electrolytic copper (E <sub>Cu</sub> )	
Contact plating	Tin	
Fire load	0.078 MJ	
Weight	4.5 g	

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

Commercial data		
Product Group	4 (Printed Circuit Connectors)	
eCl@ss 10.0	27-44-04-01	
eCl@ss 9.0	27-44-04-01	
ETIM 8.0	EC002643	
ETIM 7.0	EC002643	
PU (SPU)	230 pcs	
Packaging type	Box	
Country of origin	PL	
GTIN	4044918671002	
Customs tariff number	85369010000	

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	NTR NL-7095
CCA DEKRA Certification B.V.	EN 60947	71-112275
CSA DEKRA Certification B.V.	C22.2 No. 158	1604421
UR Underwriters Laboratories Inc.	UL 1059	E45172
		EU-Declaration of Confor- mity WAGO GmbH & Co. KG
		UK-Declaration of Confor- mity WAGO GmbH & Co. KG



Downloads			
Environmental Product Compliance			
Compliance Search			
Environmental Product Compliance 745-102			
Documentation			
Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	
CAD/CAE-Data			
CAD data		CAE data	
2D/3D Models 745-102		EPLAN Data Portal 745-102	
		ZUKEN Portal 745-102	
PCB Design			
Symbol and Footprint via SamacSys 745-102			
Symbol and Footprint via Ultra Librarian 745-102			
1 Compatible Products			
1.1 Optional Accessories			
1.1.1 Ferrule			
1.1.1.1 Ferrule			
<a href="#">Item No.: 216-321</a> Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow	<a href="#">Item No.: 216-151</a> Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated	<a href="#">Item No.: 216-131</a> Ferrule; Sleeve for 0.25 mm² / AWG 24; uninsulated; electro-tin plated; silver-colored	<a href="#">Item No.: 216-322</a> Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; light turquoise
<a href="#">Item No.: 216-132</a> Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated	<a href="#">Item No.: 216-152</a> Ferrule; Sleeve for 0.34 mm² / AWG 24; uninsulated; electro-tin plated	<a href="#">Item No.: 216-241</a> 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	<a href="#">Item No.: 216-221</a> Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; white
<a href="#">Item No.: 216-141</a> Ferrule; Sleeve for 0.5 mm² / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	<a href="#">Item No.: 216-121</a> Ferrule; Sleeve for 0.5 mm² / AWG 22; uninsulated; electro-tin plated; silver-colored	<a href="#">Item No.: 216-242</a> 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	<a href="#">Item No.: 216-262</a> 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









1.1.1.1 Ferrule

 <b>Item No.: 216-222</b> Ferrule; Sleeve for 0.75 mm² / 18 AWG; insulated; electro-tin plated; gray	 <b>Item No.: 216-142</b> Ferrule; Sleeve for 0.75 mm² / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	 <b>Item No.: 216-122</b> Ferrule; Sleeve for 0.75 mm² / AWG 20; uninsulated; electro-tin plated; silver-colored	 <b>Item No.: 216-243</b> Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red
 <b>Item No.: 216-263</b> Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	 <b>Item No.: 216-223</b> Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; red	 <b>Item No.: 216-143</b> Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	 <b>Item No.: 216-123</b> Ferrule; Sleeve for 1 mm² / AWG 18; uninsulated; electro-tin plated; silver-colored
 <b>Item No.: 216-224</b> Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; black	 <b>Item No.: 216-244</b> 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	 <b>Item No.: 216-264</b> 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	 <b>Item No.: 216-284</b> 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
 <b>Item No.: 216-124</b> Ferrule; Sleeve for 1.5 mm² / AWG 16; uninsulated; electro-tin plated	 <b>Item No.: 216-144</b> 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	 <b>Item No.: 216-246</b> Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	 <b>Item No.: 216-266</b> Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue
 <b>Item No.: 216-286</b> Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue	 <b>Item No.: 216-106</b> Ferrule; Sleeve for 2.5 mm² / AWG 14; uninsulated; electro-tin plated; silver-colored		









1.1.2 Jumper

1.1.2.1 Jumper

 <b>Item No.: 745-180</b> Jumper; 10-way; silver-colored	 <b>Item No.: 745-181</b> Jumper; 2-way; unplated; silver-colored	 <b>Item No.: 745-182</b> Jumper; 2-way; unplated; silver-colored	 <b>Item No.: 745-183</b> Jumper; 3-way; unplated; silver-colored
 <b>Item No.: 745-184</b> Jumper; 4-way; unplated; silver-colored	 <b>Item No.: 745-185</b> Jumper; 5-way; unplated; silver-colored		




































1.1.3 Marking

1.1.3.1 Marker

 <b>Item No.: 2009-145/000-006</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue	 <b>Item No.: 2009-145/000-007</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray	 <b>Item No.: 2009-145/000-023</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green	 <b>Item No.: 2009-145/000-012</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange
 <b>Item No.: 2009-145/000-005</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red	 <b>Item No.: 2009-145/000-024</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet	 <b>Item No.: 2009-145</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	 <b>Item No.: 2009-145/000-002</b> Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow




1.1.3.1 Marker

 <b>Item No.: 248-501/000-006</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; blue	 <b>Item No.: 248-501/000-007</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; gray	 <b>Item No.: 248-501/000-023</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; green	 <b>Item No.: 248-501/000-017</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; light green
 <b>Item No.: 248-501/000-012</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; orange	 <b>Item No.: 248-501/000-005</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red	 <b>Item No.: 248-501/000-024</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; violet	 <b>Item No.: 248-501</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white
 <b>Item No.: 248-501/000-002</b> Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow	 <b>Item No.: 793-5501/000-006</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; blue	 <b>Item No.: 793-5501/000-007</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; gray	 <b>Item No.: 793-5501/000-023</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; green
 <b>Item No.: 793-5501/000-017</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; light green	 <b>Item No.: 793-5501/000-012</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; orange	 <b>Item No.: 793-5501/000-005</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; red	 <b>Item No.: 793-5501/000-024</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; violet
 <b>Item No.: 793-5501</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white	 <b>Item No.: 793-5501/000-002</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; yellow	 <b>Item No.: 793-501/000-006</b> WMB marking card; as card; not stretchable; plain; snap-on type; blue	 <b>Item No.: 793-501/000-007</b> WMB marking card; as card; not stretchable; plain; snap-on type; gray
 <b>Item No.: 793-501/000-023</b> WMB marking card; as card; not stretchable; plain; snap-on type; green	 <b>Item No.: 793-501/000-017</b> WMB marking card; as card; not stretchable; plain; snap-on type; light green	 <b>Item No.: 793-501/000-012</b> WMB marking card; as card; not stretchable; plain; snap-on type; orange	 <b>Item No.: 793-501/000-005</b> WMB marking card; as card; not stretchable; plain; snap-on type; red
 <b>Item No.: 793-501/000-024</b> WMB marking card; as card; not stretchable; plain; snap-on type; violet	 <b>Item No.: 793-501</b> WMB marking card; as card; not stretchable; plain; snap-on type; white	 <b>Item No.: 793-501/000-002</b> WMB marking card; as card; not stretchable; plain; snap-on type; yellow	 <b>Item No.: 2009-115/000-006</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue
 <b>Item No.: 2009-115/000-007</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray	 <b>Item No.: 2009-115/000-023</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green	 <b>Item No.: 2009-115/000-017</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green	 <b>Item No.: 2009-115/000-012</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange
 <b>Item No.: 2009-115/000-024</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet	 <b>Item No.: 2009-115</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	 <b>Item No.: 2009-115/000-002</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow	

1.1.4 Test and measurement

1.1.4.1 Testing accessories

 <b>Item No.: 210-136</b> Test plug; 2 mm Ø; with 500 mm cable; red
--

1.1.5 Tool

1.1.5.1 Operating tool



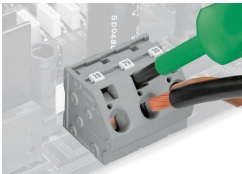
**Item No.: 210-658**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured

**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

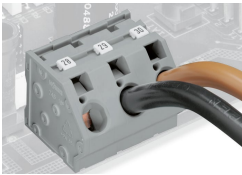
Installation Notes

Conductor termination



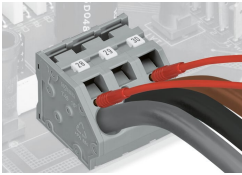
Inserting/removing a conductor via 5.5 mm screwdriver – 745 Series, 16 mm².

Marking



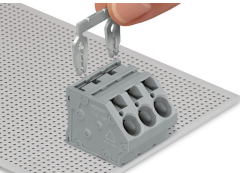
Marking via Mini-WSB and WMB markers or factory direct marking – 745 Series.

Testing

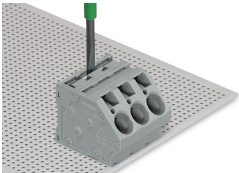


Testing with test plug – 745 Series.

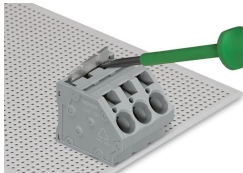
Commoning



Inserting a comb-style jumper bar.



To insert a comb-style jumper bar, push it down using a screwdriver until it hits the backstop – 745 Series.



To remove the jumper bar, lift it up using a screwdriver – 745 Series.