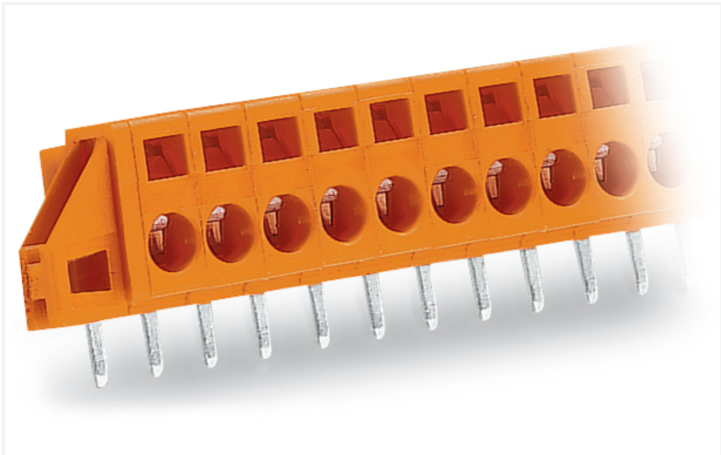
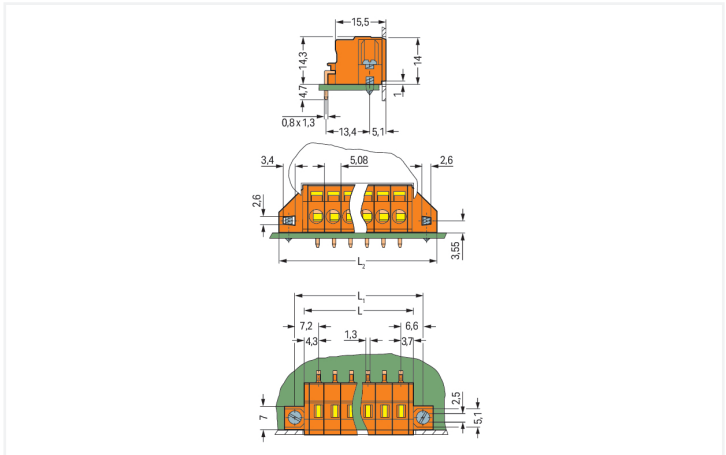




Color: ■ orange

Similar to illustration



Dimensions in mm
L = (pole no. x pin spacing) + 3 mm
L1 = L + 5.8 mm
L2 = L1 + 6.4 mm
for plate thickness up to 1.5 mm

Durchführungsklemme Serie 231 mit Lötstiftabmessungen 0,8 x 1,3 mm

Die Durchführungsklemme (Artikelnummer 231-633/023-000) ermöglicht eine schnelle und sichere Verdrahtung. Mit unseren Durchführungsklemmen bekommen Sie ein universelles Steckverbindersystem, das vielseitig Verwendung finden kann: als Leiterplatten-Steckverbinder, als Durchführungssteckverbinder, als fliegende Steckverbindung für verschiedene Montagearten oder als Steckverbinder auf Reihenklemmen. Bei dieser Durchführungsklemme ist für den Leiteranschluss eine Abisolierlänge im Bereich von 8 bis 9 mm nötig. Bei diesem Produkt wird die CAGE CLAMP®-Technologie genutzt. Mit dem CAGE CLAMP® Universalanschluss steht Ihnen eine zuverlässige und wartungsfreie Anschluss Technik zur Verfügung, um sämtliche Leiterarten mithilfe einer Käfigzugfeder anzuschließen. Es ist keine Vorbehandlung der Leiter notwendig, beispielsweise durch das Aufcrimpen von Aderendhülsen. In Breite x Höhe x Tiefe betragen die Abmessungen (30,44 x 19 x 19,1) mm. In Abhängigkeit von der Leiterart ist diese Durchführungsklemme gemacht für Leiterquerschnitte von 0,08 mm² bis 2,5 mm². Die Kontaktoberfläche besteht aus Zinn. Durch ein Betätigungswerkzeug wird diese Durchführungsklemme betätigt. Die Verlötung der Durchführungsklemme erfolgt mittels THT. Der Leiter wird im Winkel von 0 ° zur Platine eingeführt.

Notes	
Variants:	Other pole numbers Other colors Direct marking Versions without mounting flanges Other versions (or variants) can be requested from WAGO Sales or configured at https://configurator.wago.com/ .

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 surge voltage		4 kV	4 kV	4 kV
Rated current		16 A	16 A	16 A
Approvals per		CSA		
Use group		B	C	D
Rated voltage		300 V	150 V	300 V
Rated current		15 A	15 A	10 A
Approvals per		UL 1059		
Use group		B	C	D
Rated voltage		300 V	150 V	300 V
Rated current		15 A	15 A	10 A

Connection data

Clamping units	3
Total number of potentials	3
Number of connection types	1
Number of levels	1

Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Solid conductor	0.08 ... 2.5 mm² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 2.5 mm² / 28 ... 14 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 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	0 °
Pole number	3

Physical data

Pin spacing	5.08 mm / 0.2 inches
Width	30.44 mm / 1.198 inches
Height	19 mm / 0.748 inches
Height from the surface	14.3 mm / 0.563 inches
Depth	19.1 mm / 0.752 inches
Solder pin length	4.7 mm
Solder pin dimensions	0.8 x 1.3 mm
Drilled hole diameter with tolerance	1.8 ^(+0.1) mm
PCB thickness (max.)	1.5 mm

Mechanical data

Mounting type	Mounting flange
Mounting type	Feed-through mounting Panel mounting

PCB contact

PCB contact	THT
Solder pin arrangement	over the entire terminal strip (in-line)
Number of solder pins per potential	1

Material data

Note (material data)	Information on material specifications can be found here
Color	orange
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E _{Cu})
Contact Plating	Tin
Fire load	0.129 MJ
Weight	5.1 g



Environmental requirements	
Limit temperature range	-60 ... +105 °C
Processing temperature	-35 ... +60 °C

Commercial data	
Product Group	3 (Multi Conn. System)
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918282987
Customs tariff number	85369010000

Product Classification	
UNSPSC	39121409
eCl@ss 10.0	27-44-03-09
eCl@ss 9.0	27-44-04-02
ETIM 9.0	EC002637
ETIM 8.0	EC002637
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates					
General approvals			Approvals for marine applications		
					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CSA DEKRA Certification B.V.	C22.2	1466354	BV Bureau Veritas S.A.	IEC 60998	11915/D0 BV
UR Underwriters Laboratories Inc.	UL 1059	E45172			

Downloads	
Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 231-633/023-000	



Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	

CAD/CAE-Data

CAE data	PCB Design
EPLAN Data Portal 231-633/023-000	Symbol and Footprint via SamacSys 231-633/023-000
	Symbol and Footprint via Ultra Librarian 231-633/023-000

1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule

 Item No.: 216-301 Ferrule; Sleeve for 0.25 mm² / AWG 24; un-insulated; electro-tin plated; yellow	 Item No.: 216-302 Ferrule; Sleeve for 0.34 mm² / 22 AWG; in-sulated; electro-tin plated; light turquoise	 Item No.: 216-201 Ferrule; Sleeve for 0.5 mm² / 20 AWG; in-sulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white	 Item No.: 216-241 Ferrule; Sleeve for 0.5 mm² / 20 AWG; in-sulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white
 Item No.: 216-141 Ferrule; Sleeve for 0.5 mm² / 20 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	 Item No.: 216-101 Ferrule; Sleeve for 0.5 mm² / AWG 22; un-insulated; electro-tin plated; silver-colored	 Item No.: 216-242 Ferrule; Sleeve for 0.75 mm² / 18 AWG; in-sulated; 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; in-sulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray
 Item No.: 216-202 Ferrule; Sleeve for 0.75 mm² / 18 AWG; in-sulated; electro-tin plated; gray	 Item No.: 216-142 Ferrule; Sleeve for 0.75 mm² / 18 AWG; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92	 Item No.: 216-102 Ferrule; Sleeve for 0.75 mm² / AWG 20; un-insulated; electro-tin plated; silver-colored	 Item No.: 216-243 Ferrule; Sleeve for 1 mm² / AWG 18; in-sulated; 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; in-sulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	 Item No.: 216-203 Ferrule; Sleeve for 1 mm² / AWG 18; in-sulated; electro-tin plated; red	 Item No.: 216-103 Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated	 Item No.: 216-143 Ferrule; Sleeve for 1 mm² / AWG 18; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92
 Item No.: 216-204 Ferrule; Sleeve for 1.5 mm² / AWG 16; in-sulated; electro-tin plated; black	 Item No.: 216-244 Ferrule; Sleeve for 1.5 mm² / AWG 16; in-sulated; 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; in-sulated; 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; in-sulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black
 Item No.: 216-144 Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored	 Item No.: 216-104 Ferrule; Sleeve for 1.5 mm² / AWG 16; un-insulated; electro-tin plated; silver-colored	 Item No.: 216-106 Ferrule; Sleeve for 2.5 mm² / AWG 14; un-insulated; electro-tin plated; silver-colored	



1.1.2 Installation

1.1.2.1 Mounting accessories



Item No.: 231-195
Screw with nut; M2x12; for fixing element



Item No.: 209-147
Self-tapping screw



Item No.: 231-194
Self-tapping screw; B 2.2x13, fixing hole 1.8 mm Ø

1.1.3 Marking

1.1.3.1 Marking strip



Item No.: 210-332/508-202
Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/508-205
Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/508-204
Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



Item No.: 210-332/508-206
Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

1.1.4 Tool

1.1.4.1 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

Installation Notes

Conductor termination



Feedthrough PCB terminal strips – front-entry conductor termination

Application



Feedthrough PCB terminal strips can be used as front-panel feedthrough for external conductor termination.

Application



With flanges for PCB or front-panel mounting – either flush with enclosure or protruding