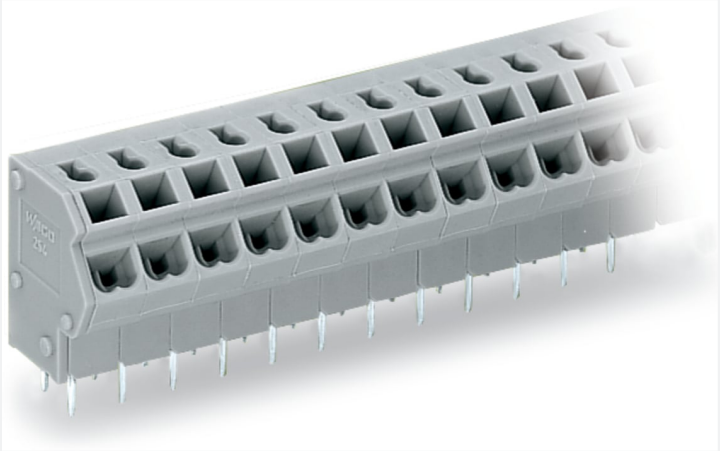
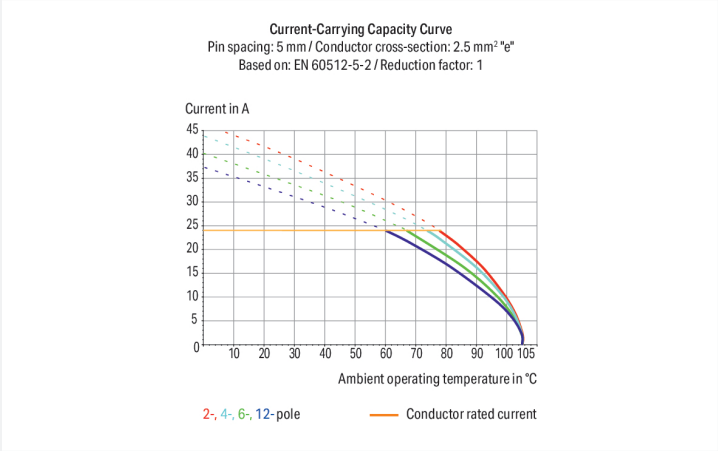
Data Sheet | Item Number: 254-174

2-conductor PCB terminal block; 0.75 mm²; Pin spacing 5/5.08 mm; 24-pole; PUSH WIRE®; gray

https://www.wago.com/254-174





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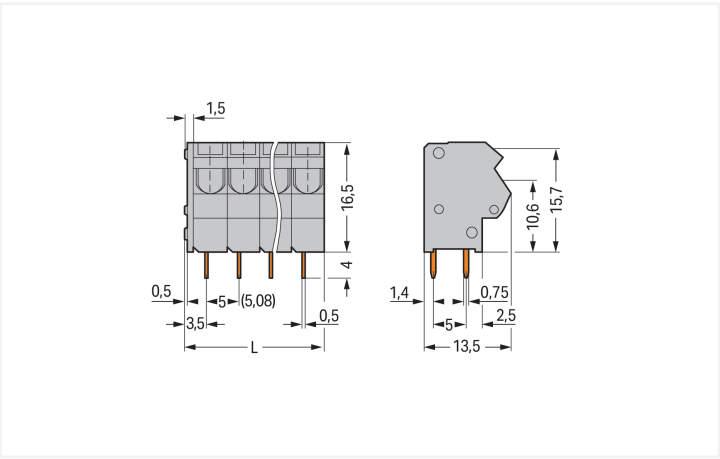

Dimensions in mm
L = (pole no. x pin spacing) + 1.5 mm

PCB terminal block, 254 Series, PUSH WIRE®

Our PCB terminal block (item number 254-174) is designed for seamless electrical installations. It is a universal connector that can be used almost 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. Ensure that the strip lengths are between 10 and 12 mm when connecting conductors to this PCB terminal block. This product features one conductor terminal and utilizes PUSH WIRE®. Our PUSH WIRE® connection uses the stiffness of the conductor to overcome the clamping spring's contact force, allowing faster and easier conductor clamping. The item's dimensions are (121.5 x 20.5 x 13.5) mm (width x height x depth). Depending on the conductor type, this PCB terminal block is ideal for conductor cross sections ranging from 0.25 mm² to 0.75 mm².

Tin is used for coating the contact surfaces. An operating tool is used to operate this PCB terminal block. THT is used to solder the PCB terminal block. Insert the conductor into the board at a 45° 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	10 A	10 A	10 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	48
Total number of potentials	24
Number of connection types	1
Number of levels	1

Connection 1

Connection technology	PUSH WIRE®
Actuation type	Operating tool
Solid conductor	0.25 … 0.75 mm² / 22 … 18 AWG
Strip length	10 … 12 mm / 0.39 … 0.47 inches
Conductor connection direction to PCB	45 °
Pole number	24

Physical data

Pin spacing	5/5.08 mm / 0.197/0.2 inches
Width	121.5 mm / 4.783 inches
Height	20.5 mm / 0.807 inches
Height from the surface	16.5 mm / 0.65 inches
Depth	13.5 mm / 0.531 inches
Solder pin length	4 mm
Solder pin dimensions	0.5 x 0.75 mm
Drilled hole diameter	1.1 $^{(+0.1)}$ 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)	Information on material specifications can be found here
Color	gray
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	0.437 MJ
Weight	27.5 g

Continued on next page

Environmental requirements

Limit temperature range	-60 … +105 °C

Commercial data

Product Group	4 (Printed Circuit Connectors)
PU (SPU)	40 (10) pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918941280
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

Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7770
CSA DEKRA Certification B.V.	C22.2	70154033
KEMA/KEUR DEKRA Certification B.V.	EN 60947	71-109997
UR Underwriters Laboratories Inc.	UL 1059	E45172

Approvals for marine applications

Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	24-0095975-PDA
BV Bureau Veritas S.A.	IEC 60998	11915/E0 BV
DNV DNV GL SE	-	TAE000016Z
PRS Polski Rejestr Statków	-	TE/1095/880590/23

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 254-174

Continued on next page

Documentation

Additional Information

Technical Section	03.04.2019	pdf 2027.26 KB

CAD/CAE-Data

CAE data

EPLAN Data Portal 254-174

PCB Design

Symbol and Footprint via SamacSys 254-174

Symbol and Footprint via Ultra Librarian 254-174

1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule

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.: 216-141
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.: 216-242
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.: 216-142
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.: 216-243
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.: 216-143
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.: 216-244
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.: 216-144
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

1.1.2 Test and measurement

1.1.2.1 Testing accessories



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

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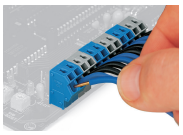
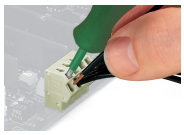
Installation Notes

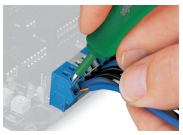
Conductor termination



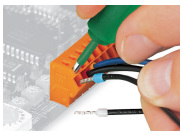
Insert solid conductors via push-in termination.



Inserting a tip-bonded conductor via screwdriver.

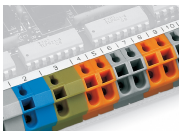


Removing a solid conductor.



Inserting/removing a ferruled conductor.

Marking

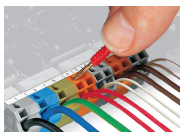


Labeling via self-adhesive marking strips.



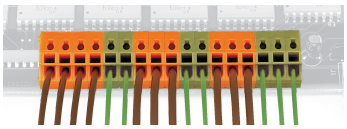
Labeling via factory direct marking.

Testing

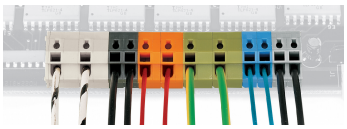


Testing with 2 mm Ø test plug.

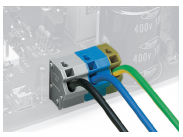
Application



Mixed terminal strips can be assembled using different housing colors for the formation of groups.



Mixed terminal strips can be assembled using different pin spacing and housing colors for the formation of groups.



Application example: field-wiring terminal strip