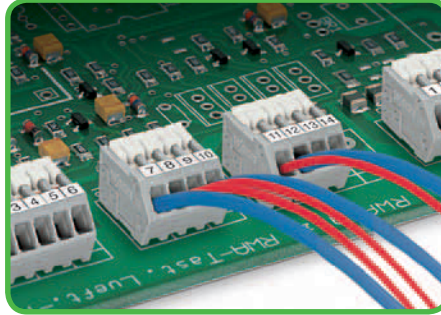
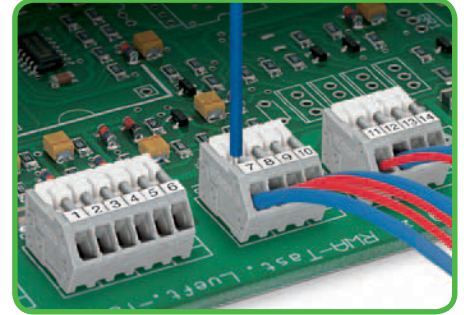


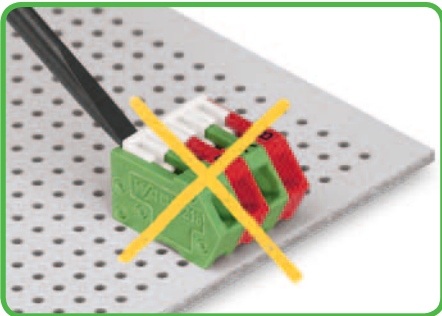
Terminating stranded conductors in confined spaces requires a great deal of patience, unless you use the new 218 Series terminal strips. The clamping units of these strips can be held open during termination process via integrated locking slide.



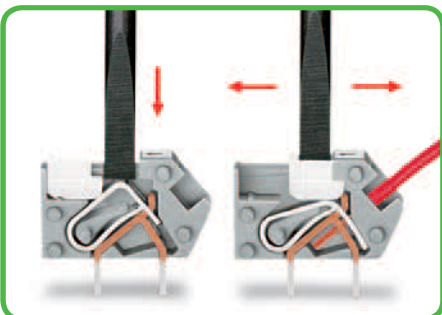
Terminating 0.75 mm<sup>2</sup> / AWG 18 conductors is possible; however insulation diameter does not allow clamping units to be terminated in a row with this conductor size.



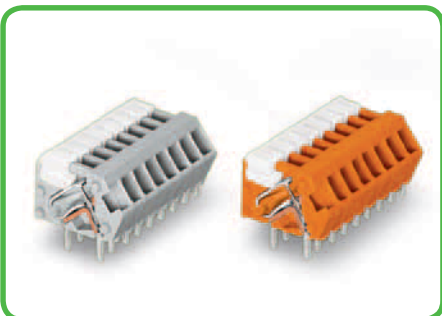
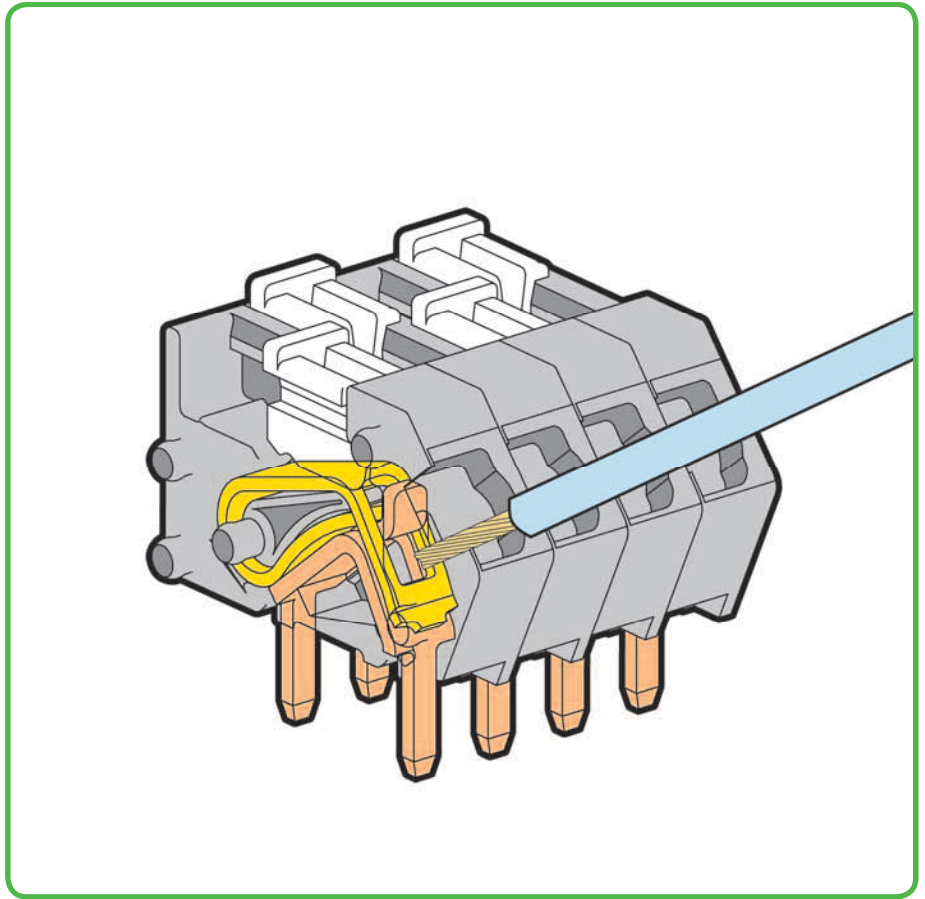
Testing directly on the clamping spring.



Incorrect - Do not operate the locking slides from the back.



Conductor termination: To momentarily open clamping unit, use screwdriver and then insert stripped conductor. To open clamping unit for extended period, move locking slide toward conductor entry hole. Then fully insert stripped conductor and move locking slide back to original position (also possible perform with fingernail).



Insulating housings available in different colors.



Marking via self-adhesive strips or ...



... factory direct printing.

CAGE CLAMP® clamps the following copper conductors:\*

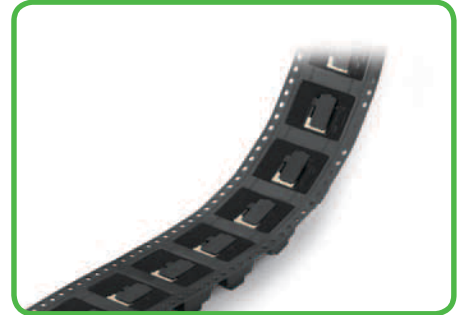
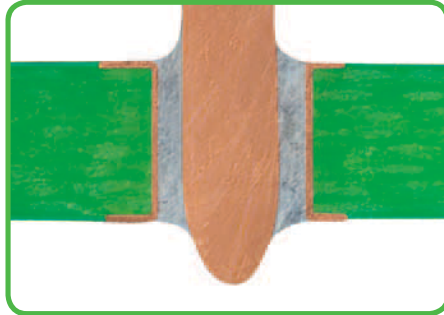
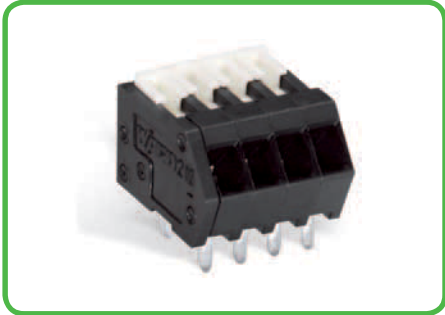
- solid

stranded

fine-stranded, also with tinned single strands

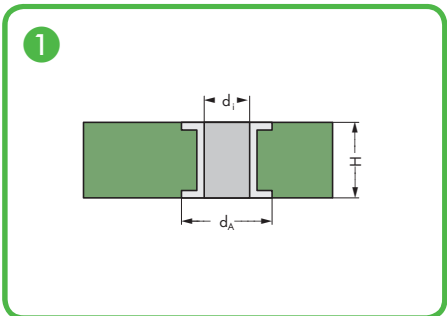
\* For aluminum conductors, see notes in Section 11.

# THR Soldering Process (Through-Hole Reflow)

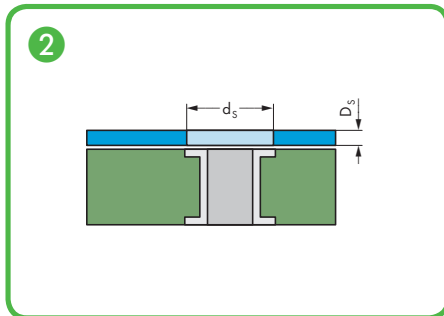


By using high-temperature resistant plastic and a streamlined pin design, the WAGO Through-Hole Reflow headers and PCB terminal blocks meet requirements for SMT process capability while maintaining necessary stability. The headers and THR PCB terminal blocks are simply pushed into the solder paste-filled PCB holes and then soldered along with the SMT components via reflow soldering. The previous wave soldering process is no longer necessary. The result is a perfect connection - both mechanically and electrically.

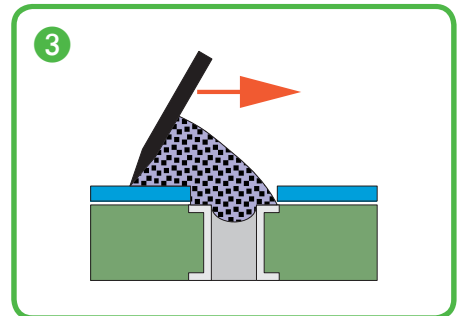
Terminal strips with additional suction pad in tape-and-reel packaging according to IEC 60286-3.



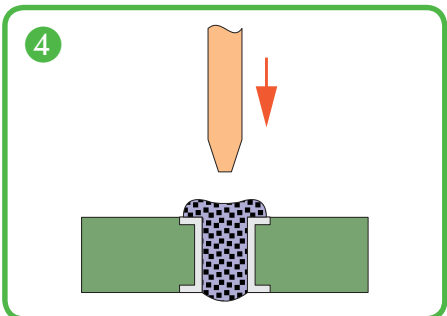
Metal-plated PCB hole



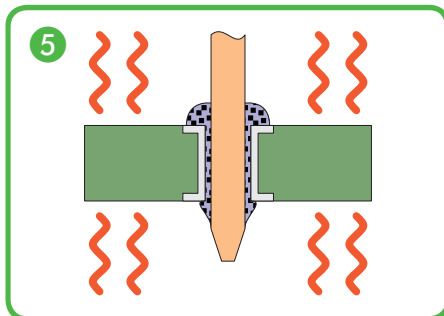
SMD positioning pattern



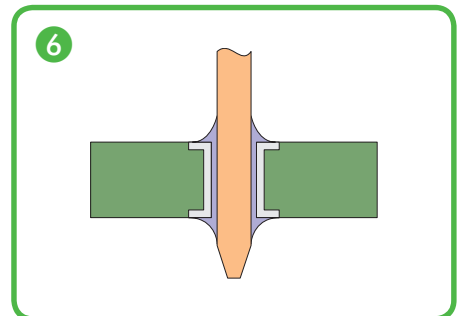
Application of solder paste



Component assembly automatic/by hand



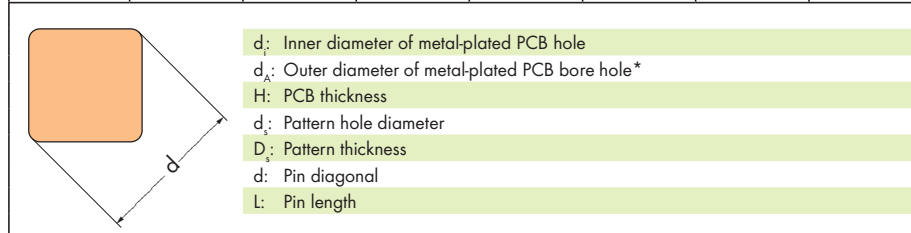
Reflow soldering process



THR soldering joint

Series	$d_i$ (mm)	$d_A$ (mm)	H (mm)	$d_s$ (mm)	$D_s$ ( $\mu$ m)	d (mm)	L (mm)
734	$1.4^{+0.1}$	2.5	< 2	2.4	150	1.2	2.4
231	$1.4^{+0.1}$	2.5	< 2	2.4	150	1.2	2.4
236	$1.1^{+0.1}$	2.2	< 2	2.1	150	0.9	3.6
733	$1.2^{+0.1}$	1.9	< 2	1.8	150	1.0	2.4
218	$1.1^{+0.1}$	1.9	< 2	1.8	150	0.9	2.8
250	$1.1^{+0.1}$	2.0	< 2	1.9	150	0.9	3.6

WAGO recommends a temperature profile that adheres to EN 61760-1 and the use of forced convection ovens for processing THR components.



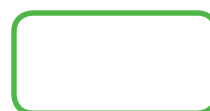
\* When laying out the metal-plated bore holes, the clearance and creepage distance requirements - as specified in the equipment standards - must be considered.



fine-stranded, tip-bonded

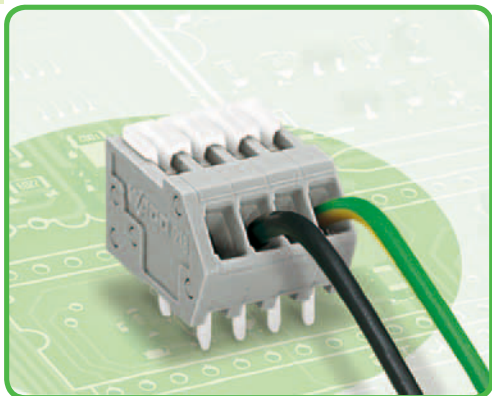


fine-stranded with ferrules (gas-tight crimped)



fine-stranded with crimped pin terminal (gas-tight)

# PCB Terminal Strips with Locking Slides 0.5 mm<sup>2</sup> Pin Spacing 2.5 mm, 2.54 mm 218 Series



- Terminal strips are just 8.1 mm high and feature an innovative, locking slide-actuated CAGE CLAMP®
- Several clamping units can be held open simultaneously
- Easy termination of stranded conductors in tight spaces (e.g., bus connectors)

## Technical data:

Pin Spacing	2.5 mm 0.098 in			2.54 mm 0.1 in		
	IEC/EN 60664-1			IEC/EN 60664-1		
Rating per						
Overtoltage category	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2
Rated voltage	80 V	160 V	320 V	80 V	160 V	320 V
Rated surge voltage	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV	2.5 kV
Nominal current	6 A	6 A	6 A	6 A	6 A	6 A
Approvals per	UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D
Rated voltage	150 V	-	-	150 V	-	-
Nominal current UL	4 A	-	-	4 A	-	-
Nominal current CSA	4 A	-	-	4 A	-	-

## Conductor and solder pin data:

Connection technology	CAGE CLAMP®
Conductor size: solid	0.08 - 0.5 mm <sup>2</sup> *
Conductor size: fine-stranded	0.08 - 0.5 mm <sup>2</sup> *
Conductor size: fine-stranded	0.25 mm <sup>2</sup> (with insulated ferrule)
Conductor size: fine-stranded	0.25 mm <sup>2</sup> (with uninsulated ferrule)
AWG	28 - 20*
Strip length	5 - 6 mm / 0.20 - 0.24 in
Conductor entry angle	40° to PCB
Solder pin: length/width	2.8 mm / 0.5 x 0.75 mm
Solder pin: drilled hole diameter	1.1 <sup>+0.1</sup> mm

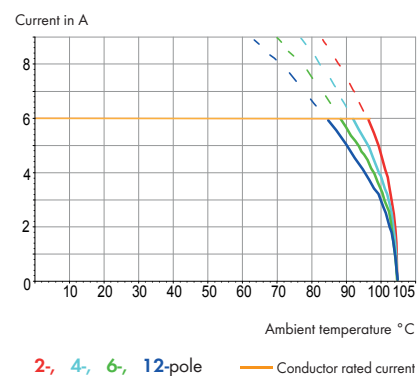
## Material data:

Material group	I
Insulating material	Nylon 6.6 (PA 6.6)
Flammability rating per UL 94	V0
Lower/Upper temperature limit	-60°C / +105°C
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>cu</sub> )
Contact plating	tin-plated

\* Terminating 0.75 mm<sup>2</sup> / AWG 18 conductors is possible; however insulation diameter does not allow clamping units to be terminated in a row.

## Current-Carrying Capacity Curve

Pin spacing: 2.5 mm / Conductor size: 0.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 1



## 218 Series accessories:

## Page:

Marking accessories	540 - 543
Operating tools	526 - 528
Test pin	538

# PCB Terminal Strips with Locking Slides 0.5 mm<sup>2</sup>

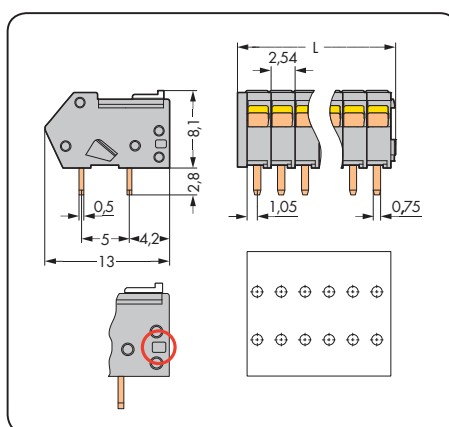
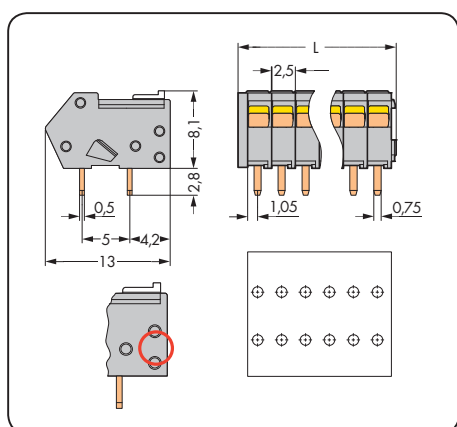
CAGE CLAMP®

1

83

1

Pin spacing 2.5 mm / 0.098 in		Pin spacing 2.54 mm / 0.1 in	
0.08 – 0.5 mm <sup>2</sup>	AWG 28 – 20	0.08 – 0.5 mm <sup>2</sup>	AWG 28 – 20
160 V/2.5 kV/2 6 A	150 V/4 A	160 V/2.5 kV/2 6 A	150 V/4 A



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

○ A groove at the back of the terminal strip differentiates between the two pin spacings.

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Terminal strip with locking slides, 2 solder pins/pole in line, gray, locking slides, white			Terminal strip with locking slides, 2 solder pins/pole in line, gray, locking slides, white		
2	218-102	1000 (10 x 100)	2	218-502	1000 (10 x 100)
3	218-103	1000 (10 x 100)	3	218-503	1000 (10 x 100)
4	218-104	500 ( 5 x 100)	4	218-504	500 ( 5 x 100)
5	218-105	500 ( 5 x 100)	5	218-505	500 ( 5 x 100)
6	218-106	280 ( 4 x 70)	6	218-506	280 ( 4 x 70)
7	218-107	240 ( 4 x 60)	7	218-507	240 ( 4 x 60)
8	218-108	220 ( 4 x 55)	8	218-508	220 ( 4 x 55)
9	218-109	200 ( 4 x 50)	9	218-509	200 ( 4 x 50)
10	218-110	180 ( 4 x 45)	10	218-510	160 ( 4 x 40)
11	218-111	160 ( 4 x 40)	11	218-511	160 ( 4 x 40)
12	218-112	140 ( 4 x 35)	12	218-512	140 ( 4 x 35)
13	218-113	140 ( 4 x 35)	13	218-513	140 ( 4 x 35)
14	218-114	120 ( 4 x 30)	14	218-514	120 ( 4 x 30)
15	218-115	120 ( 4 x 30)	15	218-515	120 ( 4 x 30)
16	218-116	100 ( 4 x 25)	16	218-516	100 ( 4 x 25)
:	:		:	:	
21	218-121	80 ( 4 x 20)	21	218-521	80 ( 4 x 20)
22	218-122	80 ( 4 x 20)	22	218-522	80 ( 4 x 20)
23	218-123	80 ( 4 x 20)	23	218-523	80 ( 4 x 20)
24	218-124	60 ( 4 x 15)	24	218-524	60 ( 4 x 15)

Item no. suffixes for colored terminal strips: (Production and prices depend on quantity required)

● black	...../000-004	<b>Ordering example:</b> Terminal strip, 2.5 mm pin spacing, 8-pole, orange 2 solder pins in line: <b>218-108/000-012</b>
● red	...../000-005	
● blue	...../000-006	
● orange	...../000-012	
● green	...../000-023	
○ white	...../000-050	

Please contact factory for other lengths, colors, mixed-color terminal strips, or direct marking.