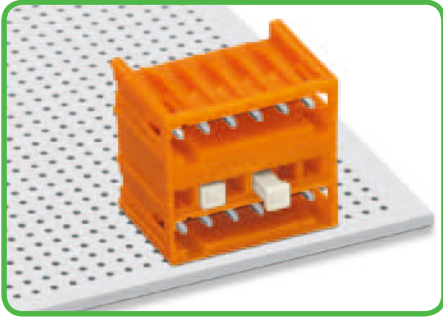
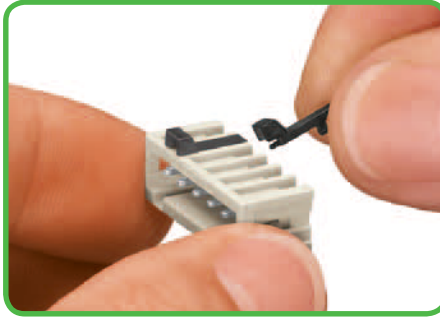


Description and Handling

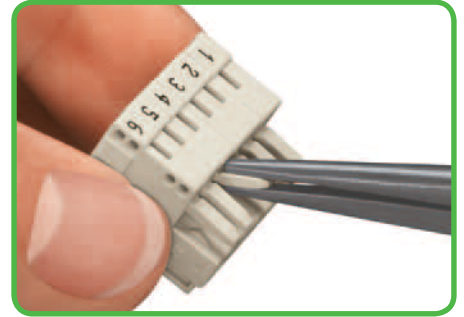
MCS - MULTI CONNECTION SYSTEM MINI



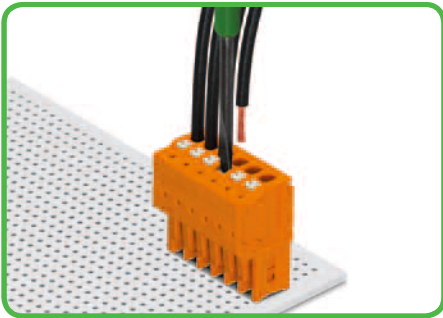
Coding a double-deck male header with solder pins - lower level.



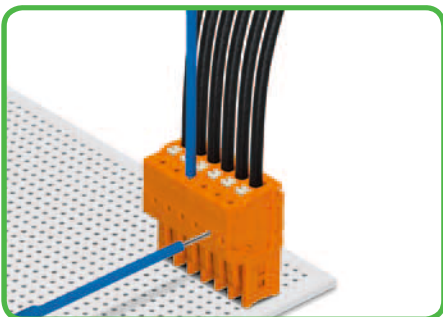
Coding a male header - fitting of coding key(s).



Coding a female connector - removal of coding finger(s).



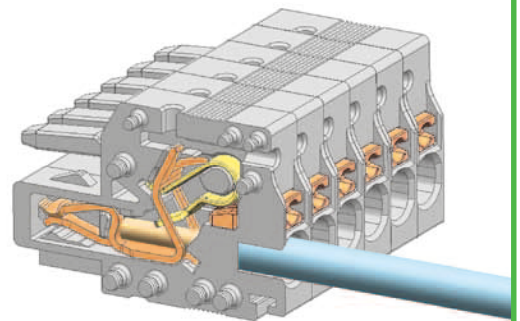
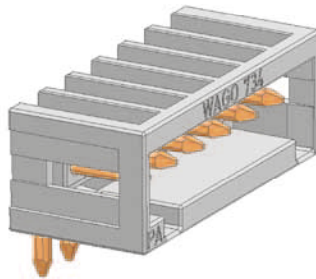
Inserting fine-stranded conductor into CAGE CLAMP®S unit via push-button; solid conductors can be simply pushed in.



Testing with 735-500 test plug, Ø 1 mm - CAGE CLAMP®S connection - insertion parallel to conductor entry.

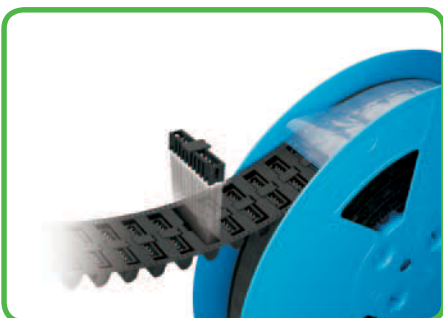
2734 Series Female Connectors with Push-Buttons and CAGE CLAMP®S

100% protected against mismatching

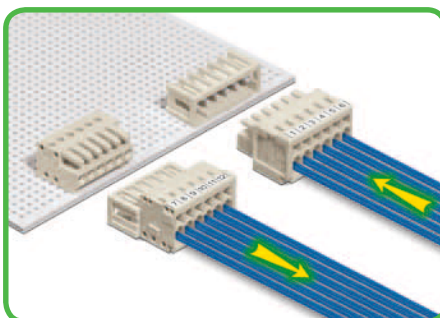


MCS-MINI

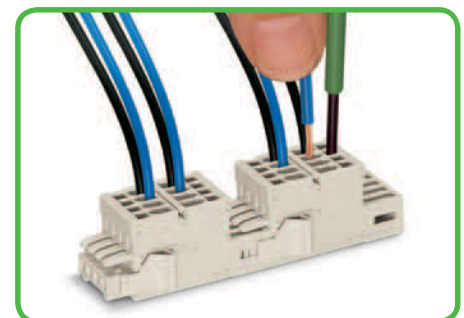
Pin spacing: 3.5 mm and 3.81 mm



THR male headers in tape-and-reel packaging for SMT applications.



Easy-to-identify PCB inputs and outputs.



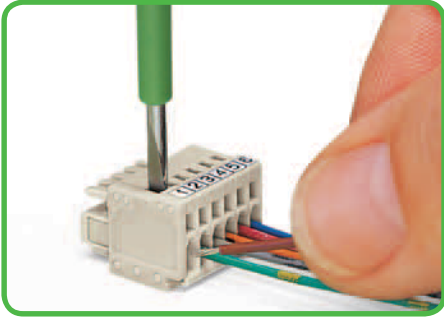
2-conductor Combi strips with locking levers for multiplying potentials.

CAGE CLAMP®S and CAGE CLAMP® clamp the following copper conductors:* solid

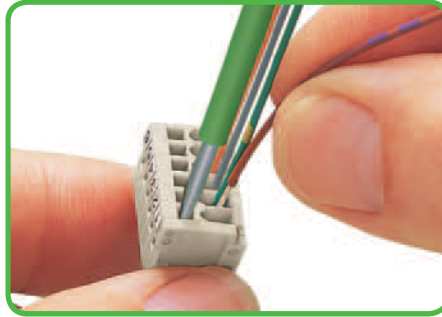
stranded

fine-stranded, also with tinned single strands

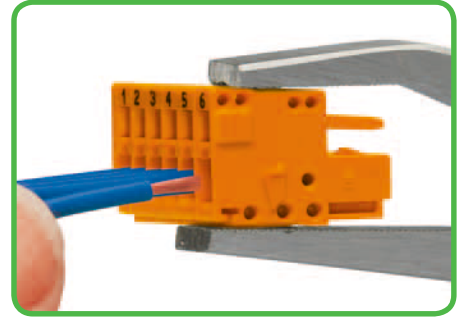
* For aluminum conductors, see notes in Section 11.



Inserting conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation perpendicular to conductor entry.



Inserting conductor via (2.5 x 0.4) mm screwdriver – CAGE CLAMP® actuation parallel to conductor entry.

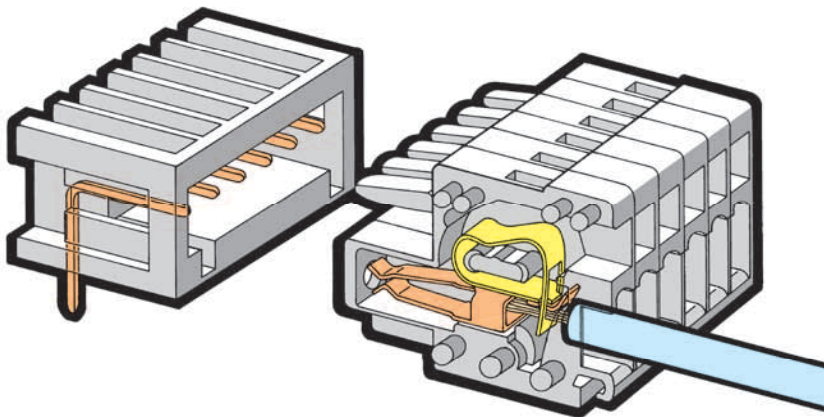


Inserting conductor into CAGE CLAMP® unit via 210-251 or 210-250 operating tool.

734 Series Female Connectors with CAGE CLAMP®

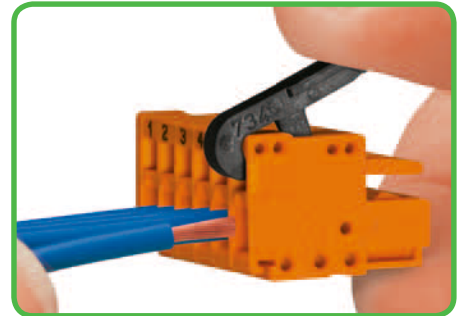
100% protected against mismatching

CAGE CLAMP®

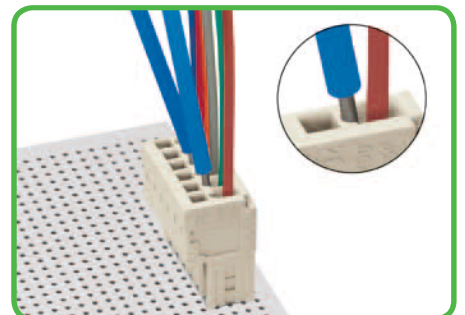


MCS-MINI

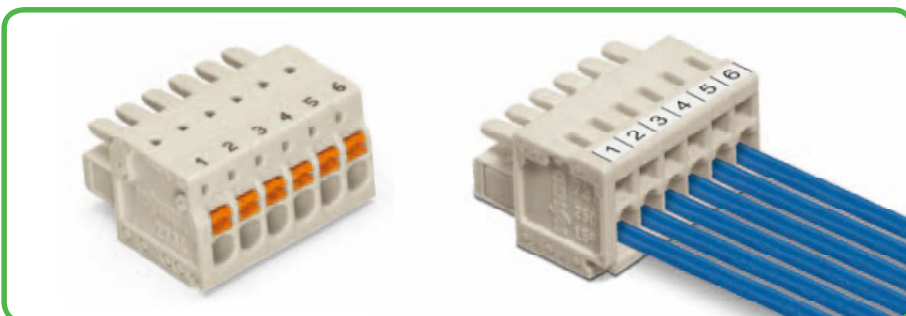
Pin spacing: 3.5 mm and 3.81 mm



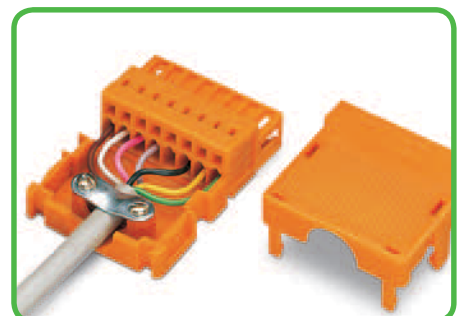
Inserting conductor into CAGE CLAMP® unit via 734-191 operating lever.



Testing with 735-500 test pin, Ø 1 mm – CAGE CLAMP® connection – touch contact with current bar.



Marking via self-adhesive marker strips or factory direct printing.



Strain relief housing for 734 Series male and female connectors with CAGE CLAMP®; strain relief plates for 734 and 2734 Series.



fine-stranded,
tip-bonded



fine-stranded with
crimped ferrules
(gas-tight)

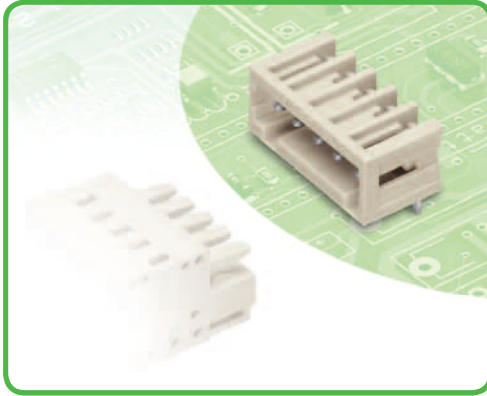


fine-stranded with
crimped pin terminals
(gas-tight)

Male Headers with Solder Pins and Press-In Pins

Pin Spacing 3.5/3.81 mm

MCS-MINI



- Male headers may be mounted horizontally or vertically via straight or angled solder pins
- 1 x 1 mm pin cross section allows nominal current up to 10 A
- Double-deck male headers save space on the PCB, providing a large number of “wire-to-board” connections
- 100 % protected against mismatching
- With coding keys

Technical data:

Pin Spacing	3.5/3.81 mm 0.138 in			3.5/3.81 mm 0.138 in			3.5/3.81 mm 0.138 in		
	IEC/EN 60664-1			IEC/EN 60664-1			IEC/EN 60664-1		
Rating per	III	III	II	III	III	II	III	III	II
Overtoltage category	III	III	II	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2	3	2	2
Rated voltage	160 V	160 V	320 V	160 V	160 V	320 V	160 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	2.5 kV	2.5 kV	2.5 kV
Nominal current	10 A	10 A	10 A	8 A	8 A	8 A	10 A	10 A	10 A
Approvals per	UL/CSA			UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V	300 V	-	300 V
Nominal current UL	10 A	-	10 A	10 A	-	10 A	10 A	-	10 A
Nominal current CSA	10 A	-	10 A	10 A	-	10 A	10 A	-	10 A

Press-in technology:

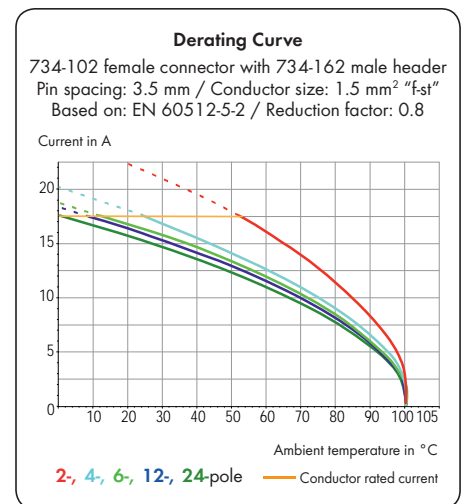
Double-deck version:

Solder and press-in pin data:

Solder pin: length/width	4.5 mm / 1 x 1 mm (straight)
Solder pin: length/width	3.8 mm / 1 x 1 mm (angled)
Solder pin: length/width	3.6 mm / 1 x 1 mm (double-deck male headers)
Solder pin: drilled hole diameter	1.4 ^{+0.1} mm
Press-in pin: length/width	2.9 mm / 0.6 x 1.2 mm
Press-in pin: drilled hole diameter	1.15 ^{+0.025}
Press-in pin: metal-plated hole diameter	1.0 mm (HAL Sn)
Press-in pin: metal-plated hole diameter	1.0 mm (Chem. Sn)
For other pin lengths, please contact factory	

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 / +100°C / Press-in pin: -40°C / +85°C
Contact material	Electrolytic copper (E _{cu}) / Press-in pin: copper alloy
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, “item no. suffix ... /010-000” is added to the “basic item no.”	



MCS-MINI accessories:

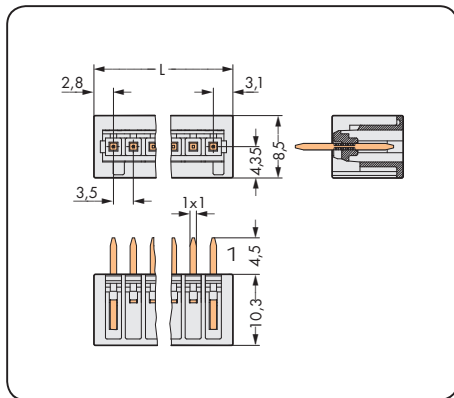
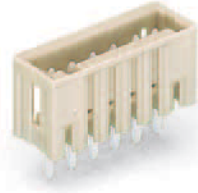
Page:

Coding keys	275

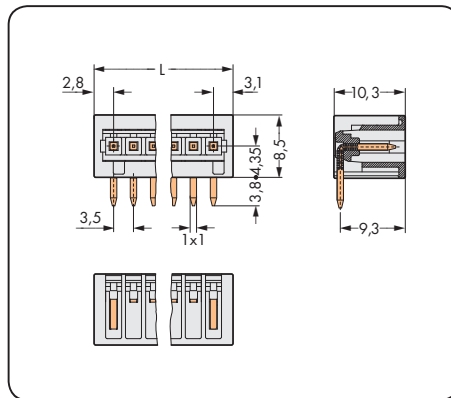
MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.

Male Headers with Solder Pins MCS-MINI

With straight solder pins Pin spacing 3.5 mm / 0.138 in		With angled solder pins Pin spacing 3.5 mm / 0.138 in	
160 V/2.5 kV/2 10 A	300 V/10 A	160 V/2.5 kV/2 10 A	300 V/10 A



L = (pole no. - 1) x pin spacing + 5.9 mm



L = (pole no. - 1) x pin spacing + 5.9 mm

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Male header with straight solder pins, light gray			Male header with angled solder pins, light gray		
2	734-132	200	2	734-162	200
3	734-133	200	3	734-163	200
4	734-134	200	4	734-164	200
5	734-135	200	5	734-165	200
6	734-136	100	6	734-166	100
7	734-137	100	7	734-167	100
8	734-138	100	8	734-168	100
9	734-139	100	9	734-169	100
10	734-140	100	10	734-170	100
11	734-141	100	11	734-171	100
12	734-142	100	12	734-172	100
13	734-143	100	13	734-173	100
14	734-144	100	14	734-174	100
16	734-146	50	16	734-176	50
18	734-148	50	18	734-178	50
20	734-150	50	20	734-180	50
24	734-154	50	24	734-184	50

1 MCS-MINI male headers with straight solder pins are also available with 3.8 mm pin projection. Add item no. suffix .../046-000.