

1-Conductor Male Connectors

Pin Spacing: 3.5 mm, 3.81 mm

MCS MINI

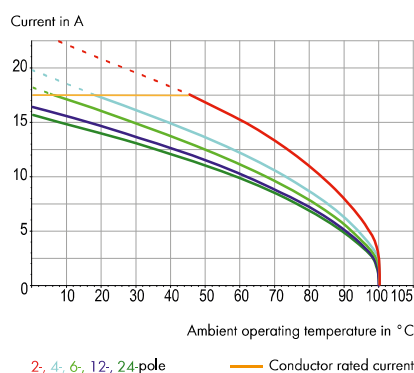


- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For wire-to-wire and board-to-wire connections
- Strain relief plates and housings for factory and field assembly
- 100% protected against mismatching
- Coding via coding fingers

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Derating Curve

1-conductor female connector (734-102) with
1-conductor male connector (734-302)
Pin spacing: 3.5 mm / Conductor cross-section: 1.5 mm² "fst"
Based on: EN 60512-5-2 / Reduction factor: 0.8



The *MULTI CONNECTION SYSTEM (MCS)* is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS 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 when unmated.

*(III / 2) ≙ Overvoltage category III /
Pollution degree 2

Marking accessories,
see page 604

Operating tools,
see page 292; 588

Direct marking,
see page 298

Coding keys,
see page 294

Mounting adapter for male and female
connectors with snap-in mounting feet,
see page 508

Screws,
see page 610

Strain relief housings,
see page 296

Strain relief plates,
see page 295

Additional technical information,
see Section 13

Approvals and corresponding ratings,
visit www.wago.com

Electrical Data for Pin Spacing

Ratings per*	3.5 mm / 0.138 inch and 3.81 mm / 0.15 inch
Rated voltage (III / 3)	160 V
Rated surge voltage (III / 3)	2.5 kV
Rated voltage (III / 2)	160 V
Rated surge voltage (III / 2)	2.5 kV
Rated voltage (II / 2)	320 V
Rated surge voltage (II / 2)	2.5 kV
Rated current	10 A

Approvals per	UL 1059
Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	10 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	10 A

Approvals per	CSA
Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	10 A
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	10 A

Connection Data

Connection technology	CAGE CLAMP® Termination
Strip length	6 ... 7 mm / 0.24 ... 0.28 inch
Conductor cross-sections	
Solid conductor	0.08 ... 1.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 1.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor with insulated ferrule	0.25 ... 1.5 mm ²
Fine-stranded conductor with uninsulated ferrule	0.25 ... 1.5 mm ²
Note (conductor cross-sections)	Terminating 1.5 mm ² conductors is possible; however insulation diameter does not allow clamping units to be terminated in a row.

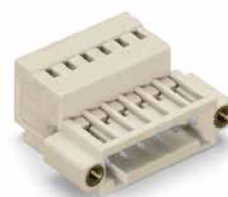
Material Data

Material group	I
Insulation material	Polyamide 66 (PA 66)
Flammability class per UL94	V0
Limit temperature range	-60 ... +100 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Electrolytic copper (E _{cu})
Contact plating	Tin-plated

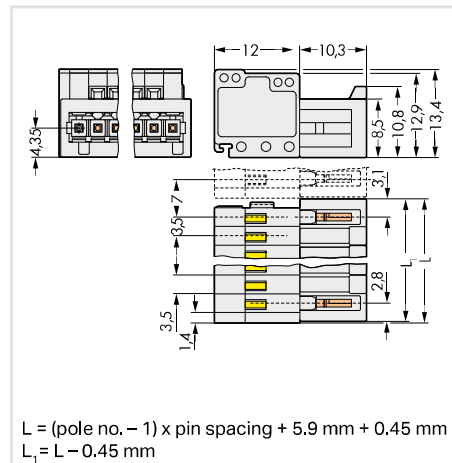
1-Conductor Male Connectors

3.5 mm pin spacing

MCS MINI



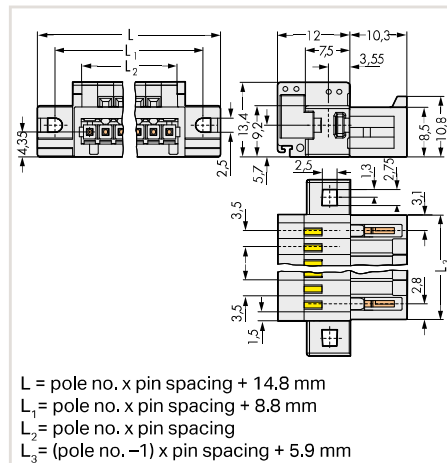
Dimensions (in mm):



1-conductor male connector, light gray, 3.5 mm (0.138 inch) pin spacing

Pole No.	Item No.	Pack. Unit
2	734-302	200
3	734-303	200
4	734-304	100
5	734-305	100
6	734-306	100
7	734-307	100
8	734-308	50
9	734-309	50
10	734-310	50
11	734-311	50
12	734-312	50
13	734-313	50
14	734-314	50
16	734-316	25
18	734-318	25
20	734-320	25
24	734-324	25

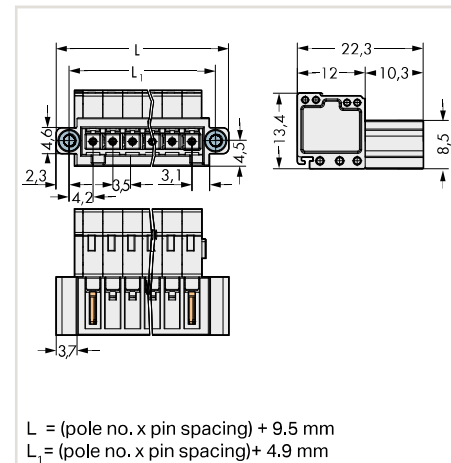
Dimensions (in mm):



1-conductor male connector, with mounting flanges, light gray, 3.5 mm (0.138 inch) pin spacing

Pole No.	Item No.	Pack. Unit
2	734-302/019-000	100
3	734-303/019-000	100
4	734-304/019-000	50
5	734-305/019-000	50
6	734-306/019-000	50
7	734-307/019-000	50
8	734-308/019-000	50
9	734-309/019-000	50
10	734-310/019-000	50
11	734-311/019-000	25
12	734-312/019-000	25
13	734-313/019-000	25
14	734-314/019-000	25
16	734-316/019-000	25
18	734-318/019-000	25
20	734-320/019-000	25
24	734-324/019-000	10

Dimensions (in mm):



1-conductor male connector, with threaded flanges, light gray, 3.5 mm (0.138 inch) pin spacing

Pole No.	Item No.	Pack. Unit
2	734-302/109-000	100
3	734-303/109-000	100
4	734-304/109-000	100
5	734-305/109-000	50
6	734-306/109-000	50
7	734-307/109-000	50
8	734-308/109-000	50
9	734-309/109-000	50
10	734-310/109-000	50
11	734-311/109-000	50
12	734-312/109-000	50
13	734-313/109-000	25
14	734-314/109-000	25
16	734-316/109-000	25
18	734-318/109-000	25
20	734-320/109-000	25
24	734-324/109-000	10

Cutout dimensions, see page 297, Table 1

Available upon request (depending on quantity required):

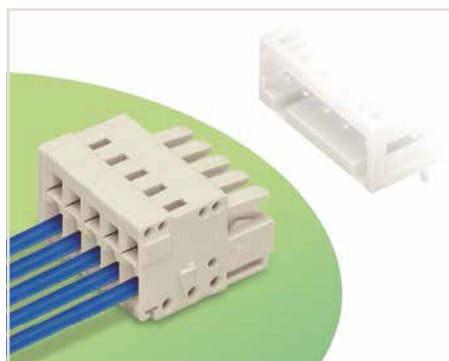
- Other pole numbers
- Gold-plated or partially gold-plated contact surfaces

Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."

1-Conductor Female Connectors

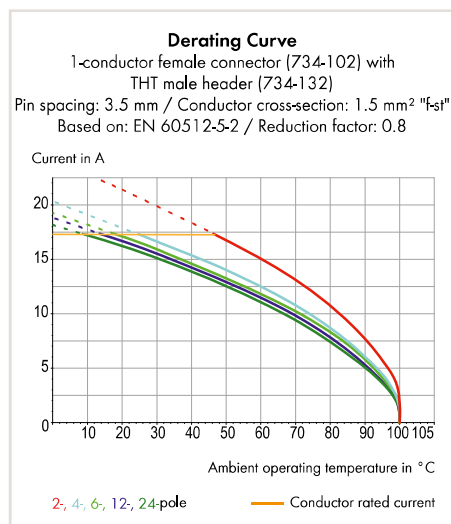
Pin Spacing: 3.5 mm, 3.81 mm

MCS MINI



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- Strain relief plates and housings for field assembly
- 100% protected against mismatching
- Coding via coding fingers

4



The *MULTI CONNECTION SYSTEM (MCS)* is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS 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 when unmated.

*(III / 2) ≥ Overvoltage category III / Pollution degree 2

Marking accessories, see page 604

Operating tools, see page 292, 588

Direct marking, see page 298

Mounting adapter for male and female connectors with snap-in mounting feet, see page 508

Test pin, see page 610

Strain relief housings, see page 296

Strain relief plates, see page 295

Additional technical information, see Section 13

Approvals and corresponding ratings, visit www.wago.com

Electrical Data for Pin Spacing

Ratings per*	3.5 mm / 0.138 inch and 3.81 mm / 0.15 inch
Rated voltage (III / 3)	IEC/EN 60664-1
Rated surge voltage (III / 3)	160 V
Rated voltage (III / 2)	2.5 kV
Rated surge voltage (III / 2)	160 V
Rated voltage (II / 2)	2.5 kV
Rated surge voltage (II / 2)	320 V
Rated current	2.5 kV
	10 A

Approvals per	UL 1059
Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	10 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	10 A

Approvals per	CSA
Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	10 A
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	10 A

Connection Data

Connection technology	CAGE CLAMP® Termination
Strip length	6 ... 7 mm / 0.24 ... 0.28 inch
Conductor cross-sections	
Solid conductor	0.08 ... 1.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.08 ... 1.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor with insulated ferrule	0.25 ... 1.5 mm ²
Fine-stranded conductor with uninsulated ferrule	0.25 ... 1.5 mm ²
Note (conductor cross-sections)	Terminating 1.5 mm ² conductors is possible; however insulation diameter does not allow clamping units to be terminated in a row.

Material Data

Material group	I
Insulation material	Polyamide 66 (PA 66)
Flammability class per UL94	V0
Limit temperature range	-60 ... +100 °C
Clamping spring material	Chrome nickel spring steel (CrNi)
Contact material	Copper alloy
Contact plating	Tin-plated

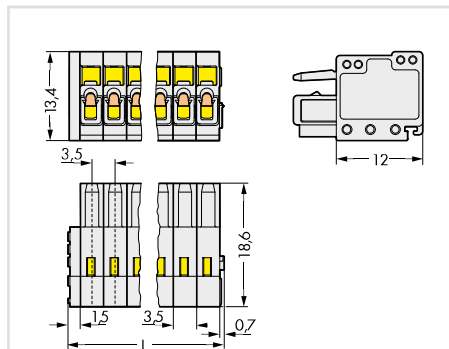
1-Conductor Female Connectors

Pin Spacing: 3.5 mm

MCS MINI



Dimensions (in mm):

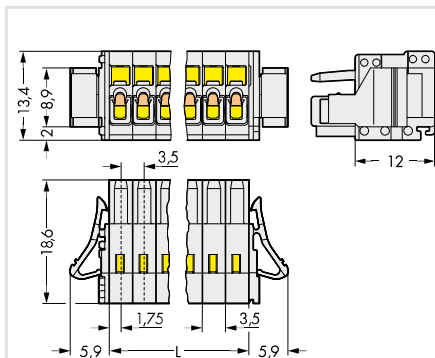


$$L = (\text{pole no.} \times \text{pin spacing}) + 2.2 \text{ mm}$$

1-conductor female connector, light gray,
3.5 mm (0.138 inch) pin spacing

Pole No.	Item No.	Pack. Unit
2	734-102	200
3	734-103	200
4	734-104	100
5	734-105	100
6	734-106	100
7	734-107	100
8	734-108	50
9	734-109	50
10	734-110	50
11	734-111	50
12	734-112	50
13	734-113	50
14	734-114	50
16	734-116	25
18	734-118	25
20	734-120	25
24	734-124	25

Dimensions (in mm):

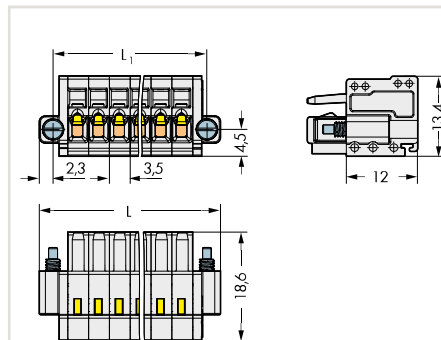


$$L = \text{pole no.} \times \text{pin spacing}$$

1-conductor female connector, with locking
levers, light gray, 3.5 mm (0.138 inch) pin spacing

Pole No.	Item No.	Pack. Unit
2	734-102/037-000	100
3	734-103/037-000	100
4	734-104/037-000	100
5	734-105/037-000	50
6	734-106/037-000	50
7	734-107/037-000	50
8	734-108/037-000	50
9	734-109/037-000	50
10	734-110/037-000	50
11	734-111/037-000	50
12	734-112/037-000	50
13	734-113/037-000	25
14	734-114/037-000	25
16	734-116/037-000	25
18	734-118/037-000	25
20	734-120/037-000	25
24	734-124/037-000	10

Dimensions (in mm):



$$L = (\text{pole no.} \times \text{pin spacing}) + 9.5 \text{ mm}$$

$$L_1 = (\text{pole no.} \times \text{pin spacing}) + 4.9 \text{ mm}$$

1-conductor female connector, with screw
flanges, light gray, 3.5 mm (0.138 inch) pin spacing

Pole No.	Item No.	Pack. Unit
2	734-102/107-000	100
3	734-103/107-000	100
4	734-104/107-000	100
5	734-105/107-000	50
6	734-106/107-000	50
7	734-107/107-000	50
8	734-108/107-000	50
9	734-109/107-000	50
10	734-110/107-000	50
11	734-111/107-000	50
12	734-112/107-000	50
13	734-113/107-000	25
14	734-114/107-000	25
16	734-116/107-000	25
18	734-118/107-000	25
20	734-120/107-000	25
24	734-124/107-000	10

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Available upon request (depending on quantity required):

- Other pole numbers
- 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."

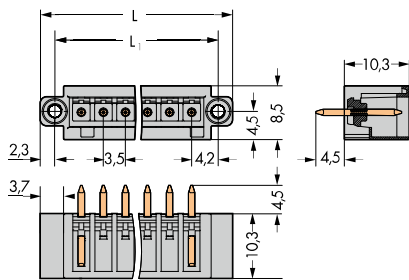
THT Male Headers with Threaded Flanges

Pin Spacing: 3.5 mm

MCS MINI



Dimensions (in mm):



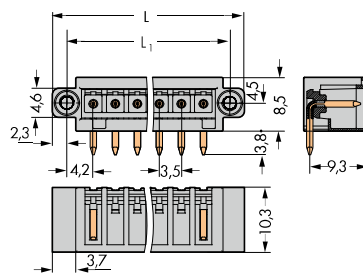
$$L = (\text{pole no.} \times \text{pin spacing}) + 9.5 \text{ mm}$$

$$L_1 = (\text{pole no.} \times \text{pin spacing}) + 4.9 \text{ mm}$$

THT male header, with straight solder pins and threaded flanges, light gray, 3.5 mm (0.138 inch) pin spacing

Pole No.	Item No.	Pack. Unit
2	734-132/108-000	200
3	734-133/108-000	200
4	734-134/108-000	200
5	734-135/108-000	100
6	734-136/108-000	100
7	734-137/108-000	100
8	734-138/108-000	100
9	734-139/108-000	100
10	734-140/108-000	100
11	734-141/108-000	100
12	734-142/108-000	100
13	734-143/108-000	50
14	734-144/108-000	50
16	734-146/108-000	50
18	734-148/108-000	50
20	734-150/108-000	50
24	734-154/108-000	50

Dimensions (in mm):



$$L = (\text{pole no.} \times \text{pin spacing}) + 9.5 \text{ mm}$$

$$L_1 = (\text{pole no.} \times \text{pin spacing}) + 4.9 \text{ mm}$$

THT male header, with angled solder pins and threaded flanges, light gray, 3.5 mm (0.138 inch) pin spacing

Pole No.	Item No.	Pack. Unit
2	734-162/108-000	200
3	734-163/108-000	200
4	734-164/108-000	200
5	734-165/108-000	100
6	734-166/108-000	100
7	734-167/108-000	100
8	734-168/108-000	100
9	734-169/108-000	100
10	734-170/108-000	100
11	734-171/108-000	100
12	734-172/108-000	100
13	734-173/108-000	50
14	734-174/108-000	50
16	734-176/108-000	50
18	734-178/108-000	50
20	734-180/108-000	50
24	734-184/108-000	50

Available upon request (depending on quantity required):

- Other pole numbers
- 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."

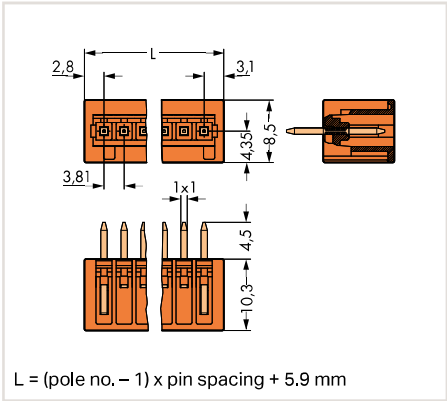
THT Male Headers

Pin Spacing: 3.81 mm

MCS MINI

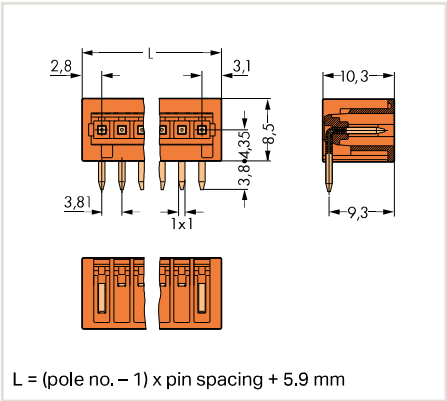


Dimensions (in mm):



THT male header, with straight solder pins, orange, 3.81 mm (0.15 inch) pin spacing		
Pole No.	Item No.	Pack. Unit
2	734-232	200
3	734-233	200
4	734-234	200
5	734-235	200
6	734-236	100
8	734-238	100
9	734-239	100
10	734-240	100
12	734-242	100
14	734-244	100
16	734-246	50
18	734-248	50
19	734-249	50
20	734-250	50

Dimensions (in mm):



THT male header, with angled solder pins, orange, 3.81 mm (0.15 inch) pin spacing		
Pole No.	Item No.	Pack. Unit
2	734-262	200
3	734-263	200
4	734-264	200
5	734-265	200
6	734-266	100
8	734-268	100
9	734-269	100
10	734-270	100
12	734-272	100
14	734-274	100
16	734-276	50
18	734-278	50
19	734-279	50
20	734-280	50

Available upon request (depending on quantity required):

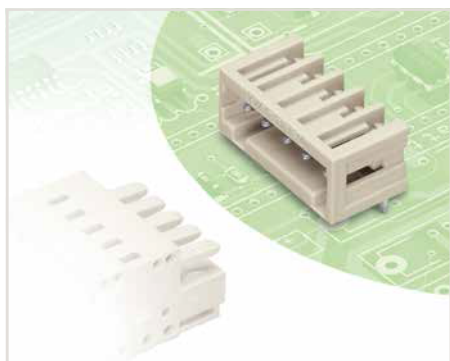
- Other pole numbers
- Gold-plated or partially gold-plated contact surfaces

Depending on the version requested, "item no. suffix ... /010-000" is added to the "basic item no."

THT Male Headers

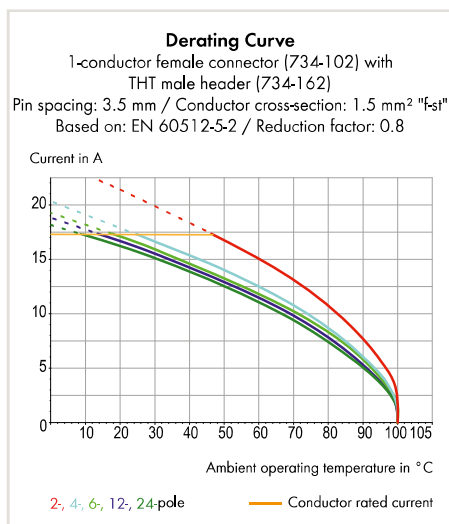
Pin Spacing: 3.5 mm, 3.81 mm

MCS MINI



- Horizontal or vertical PCB mounting via straight or angled solder pins
- 100 % protected against mismating; only mating halves with the same number of poles can be connected together
- Coding via coding fingers

4



Electrical Data for Pin Spacing

Ratings per*	3.5 mm / 0.138 inch and 3.81 mm / 0.15 inch
Rated voltage (III / 3)	160 V
Rated surge voltage (III / 3)	2.5 kV
Rated voltage (III / 2)	160 V
Rated surge voltage (III / 2)	2.5 kV
Rated voltage (II / 2)	320 V
Rated surge voltage (II / 2)	2.5 kV
Rated current	10 A

Approvals per	UL 1059
Rated voltage UL (Use Group B)	300 V
Rated current UL (Use Group B)	10 A
Rated voltage UL (Use Group D)	300 V
Rated current UL (Use Group D)	10 A

Approvals per	CSA
Rated voltage CSA (Use Group B)	300 V
Rated current CSA (Use Group B)	10 A
Rated voltage CSA (Use Group D)	300 V
Rated current CSA (Use Group D)	10 A

Solder Pin Data

Solder pin length (straight solder pins)	4.5 mm
Solder pin length (angled solder pins)	3.8 mm
Solder pin length (double-deck male headers)	3.6 mm
Solder pin dimensions	1 x 1 mm
Drilled hole diameter	1.4 ^{+0.1} mm

Material Data

Material group	I
Insulation material	Polyamide 66 (PA 66)
Flammability class per UL94	V0
Limit temperature range	-60 ... +100 °C
Contact material	Electrolytic copper (E _{cu})
Contact plating	Tin-plated

The *MULTI CONNECTION SYSTEM (MCS)* is designed without breaking capacity for compliance with DIN EN 61984. When used as intended, MCS 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 when unmated.

* (III / 2) ± Overvoltage category III /
Pollution degree 2

Coding keys,
see page 294

Additional technical information,
see Section 13

Approvals and corresponding ratings,
visit www.wago.com

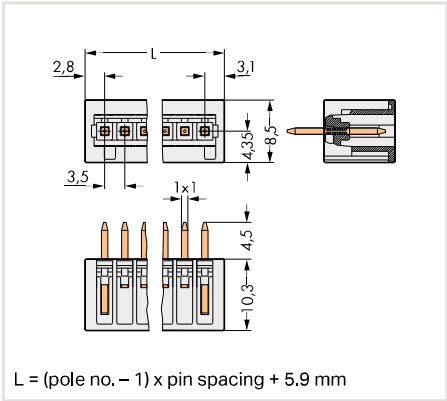
THT Male Headers

Pin Spacing: 3.5 mm

MCS MINI



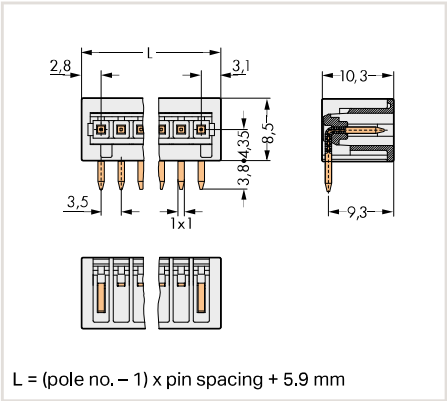
Dimensions (in mm):



THT male header, with straight solder pins, light gray, 3.5 mm (0.138 inch) pin spacing

Pole No.	Item No.	Pack. Unit
2	734-132	200
3	734-133	200
4	734-134	200
5	734-135	200
6	734-136	100
7	734-137	100
8	734-138	100
9	734-139	100
10	734-140	100
11	734-141	100
12	734-142	100
13	734-143	100
14	734-144	100
16	734-146	50
18	734-148	50
20	734-150	50
24	734-154	50

Dimensions (in mm):



THT male header, with angled solder pins, light gray, 3.5 mm (0.138 inch) pin spacing

Pole No.	Item No.	Pack. Unit
2	734-162	200
3	734-163	200
4	734-164	200
5	734-165	200
6	734-166	100
7	734-167	100
8	734-168	100
9	734-169	100
10	734-170	100
11	734-171	100
12	734-172	100
13	734-173	100
14	734-174	100
16	734-176	50
18	734-178	50
20	734-180	50
24	734-184	50

Available upon request (depending on quantity required):

- Other pole numbers
- 3.8 mm pin projection for male headers with straight solder pins; Item no. suffix .../046-000
- 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."