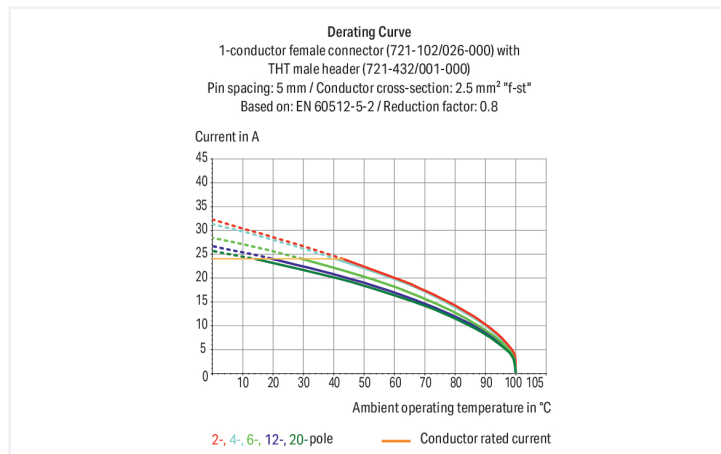


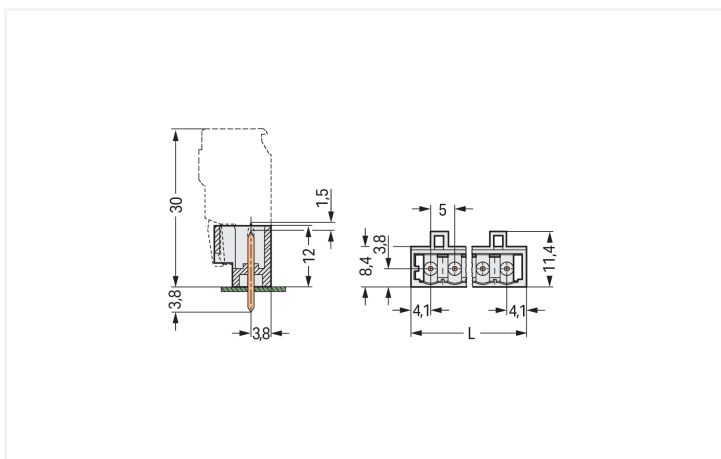
# Data Sheet | Item Number: 721-180/046-000

THT male header; 1.2 x 1.2 mm solder pin; straight; 100% protected against mismatching; Pin spacing 5 mm; 20-pole; light gray

<https://www.wago.com/721-180/046-000>



Color: ■ light gray



Dimensions in mm

L = (pole no. - 1) x pin spacing + 8.2 mm

Male connector, 721 Series, with 5 mm pin spacing

This male connector (item number 721-180/046-000) provides hassle-free electrical installations. The item's dimensions are (103.2 x 17 x 11.4) mm (width x height x depth).

The contact surface is coated with tin. THT is used to solder the pcb connector.

## Notes

## Safety Information

The MCS – MULTI CONNECTION SYSTEM includes connectors without breaking capacity in accordance with DIN EN 61984. When used as intended, these connectors must not be connected/disconnected when live or under load. When used as intended, these connectors must 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.

## Variants:

Other pole numbers  
3.8 mm pin projection for male headers with straight solder pins  
Gold-plated or partially gold-plated contact surfaces  
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	250 V	320 V	630 V
Rated impulse withstand voltage	4 kV	4 kV	4 kV
Rated current	16 A	16 A	16 A

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	15 A	-	10 A

Approvals per	UL 1977
Rated voltage	600 V
Rated current	15 A

Approvals per	CSA		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	15 A	-	10 A

## Connection Data

Total number of potentials	20
Number of connection types	1
Number of levels	1

Connection 1	
Pole number	20

## Physical data

Pin spacing	5 mm / 0.197 inches
Width	103.2 mm / 4.063 inches
Height	17 mm / 0.669 inches
Height from the surface	12 mm / 0.472 inches
Depth	11.4 mm / 0.449 inches
Solder pin length	3.8 mm
Solder pin dimensions	1.2 x 1.2 mm
!	1.7 (+0.1) mm

## Mechanical data

Variable coding	Yes
Anti-rotation protection	Yes

### Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for PCB
Mismating protection	Yes
Mating direction to the PCB	90 °

### PCB contact

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

### Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	light gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E <sub>Cu</sub> )
Contact Plating	Tin
Fire load	0.115 MJ
Weight	7.4 g

### Environmental requirements

Limit temperature range	-60 ... +100 °C
Processing temperature	-35 ... +60 °C

### Commercial data

Product Group	3 (Multi Conn. System)
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	PL
GTIN	4045454841782
Customs tariff number	85366930000

### Product Classification

UNSPSC	39121409
eCl@ss 10.0	27-44-04-02
eCl@ss 9.0	27-44-04-02
ETIM 9.0	EC002637
ETIM 10.0	EC002637
ECCN	NO US CLASSIFICATION

**Environmental Product Compliance**

RoHS Compliance Status	Compliant, No Exemption
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**Approvals / Certificates**

**General approvals**



Approval	Standard	Certificate Name
UL Underwriters Laboratories Inc.	UL 1977	E45171
UL Underwriters Laboratories Inc.	UL 1059	E45172

**Approvals for marine applications**



Approval	Standard	Certificate Name
BV Bureau Veritas S.A.	IEC 60998	11915/E0 BV

**Downloads**

**Environmental Product Compliance**

Compliance Search	
Environmental Product Compliance 721-180/046-000	<a href="#">↓</a>

**Documentation**

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	<a href="#">↓</a>

**CAD/CAE-Data**

PCB Design	
Symbol and Footprint via SamacSys 721-180/046-000	<a href="#">↓</a>
Symbol and Footprint via Ultra Librarian 721-180/046-000	<a href="#">↓</a>

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Female connector/socket



**Item No.:** [721-120/026-000](#)

1-conductor female connector; CAGE CLAMP®; 2.5 mm<sup>2</sup>; Pin spacing 5 mm; 20-pole; 100% protected against mismatching; 2,50 mm<sup>2</sup>; light gray

### 1.2 Optional Accessories

#### 1.2.1 Coding

##### 1.2.1.1 Coding



**Item No.:** [231-129](#)

Coding key; snap-on type; light gray

#### 1.2.2 Marking

##### 1.2.2.1 Marking strip



**Item No.:** [210-833](#)

Marking strips; 25 m on roll; 6 mm wide; plain; Self-adhesive; white

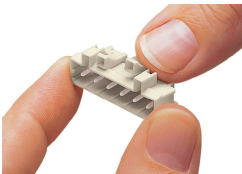


**Item No.:** [210-834](#)

Marking strips; on reel; 5 mm wide; plain; Self-adhesive; white

## Installation Notes

### Coding



Coding a male header – fitting coding key (s).