

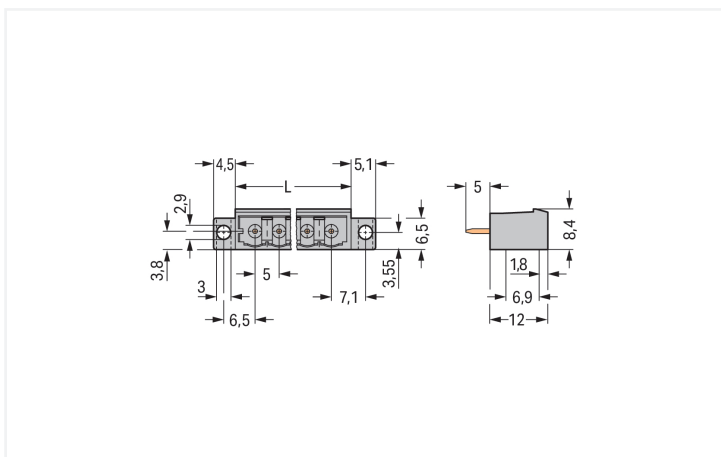
# Data Sheet | Item Number: 231-166/040-000

THT male header; 1.2 x 1.2 mm solder pin; straight; clamping collar; Pin spacing 5 mm; 6-pole; gray

<https://www.wago.com/231-166/040-000>



Color: ■ gray



Dimensions in mm

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

Male connector, 231 Series, gray

Our male connector (item number 231-166/040-000) is designed for seamless electrical installations. Dimensions: (42.8 x 17 x 8.4) 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		
Overtoltage 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	20 A	-	10 A

## Ratings

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

## Approvals per

Approvals per	CSA		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	20 A	-	10 A

## Connection Data

Total number of potentials	6
Number of connection types	1
Number of levels	1

## Connection 1

Pole number	6
-------------	---

## Physical data

Pin spacing	5 mm / 0.197 inches
Width	42.8 mm / 1.685 inches
Height	17 mm / 0.669 inches
Height from the surface	12 mm / 0.472 inches
Depth	8.4 mm / 0.331 inches
Solder pin length	5 mm
Solder pin dimensions	1.2 x 1.2 mm
!	1.7 <sup>(+0.1)</sup> mm

## Mechanical data

Variable coding	Yes
Mounting type	Mounting flange
Mounting type	Feed-through mounting Panel mounting
Anti-rotation protection	Yes
Suitable for through-panel applications	Yes

### Plug-in connection

Contact type (pluggable connector)	Male connector/plug
Connector (connection type)	for PCB
Mismating protection	No
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	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	0.046 MJ
Weight	2.7 g

### Environmental requirements

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

### Commercial data

Product Group	3 (Multi Conn. System)
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918928458
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
------------------------	-------------------------

**Approvals / Certificates**

**General approvals** **Approvals for marine applications**



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-113351
CSA DEKRA Certification B.V.	C22.2	LR 18677-25
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-130478 REV.1
UL Underwriters Laboratories Inc.	UL 1977	E45171
UL Underwriters Laboratories Inc.	UL 1059	E45172

Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	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 231-166/040-000	<a href="#">↓</a>

**Documentation**

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

**CAD/CAE-Data**

CAD data	
2D/3D Models 231-166/040-000	<a href="#">↓</a>

CAE data	
EPLAN Data Portal 231-166/040-000	<a href="#">↓</a>
ZUKEN Portal 231-166/040-000	<a href="#">↓</a>

PCB Design	
Symbol and Footprint via SamacSys 231-166/040-000	↓
Symbol and Footprint via Ultra Librarian 231-166/040-000	↓

## 1 Compatible Products

### 1.1 System counterpart

#### 1.1.1 Female connector/socket



**Item No.: 231-106/026-000**  
 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 6-pole; 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

##### 1.2.1.2 Intermediate plate



**Item No.: 231-500**  
 Spacer; for formation of groups; light gray

### 1.2.2 Installation

#### 1.2.2.1 Mounting accessories



**Item No.: 231-295**  
 Screw with nut



**Item No.: 231-195**  
 Screw with nut; M2x12; for fixing element



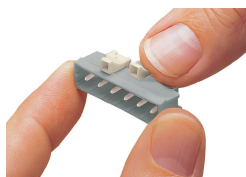
**Item No.: 209-147**  
 Self-tapping screw



**Item No.: 231-194**  
 Self-tapping screw; B 2.2x13, fixing hole 1.8 mm Ø

## Installation Notes

### Coding



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