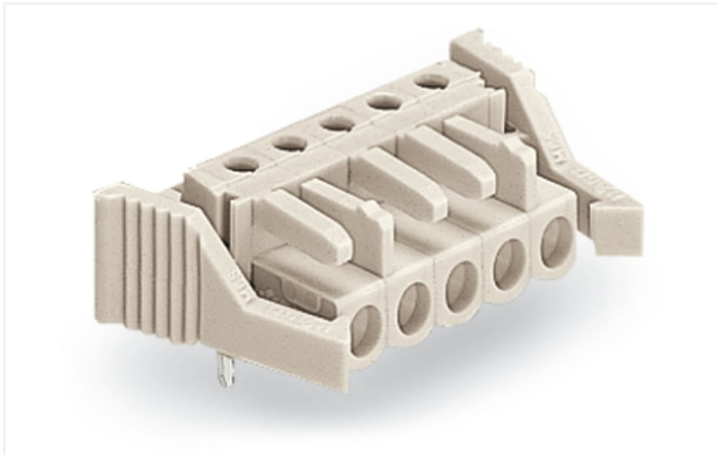


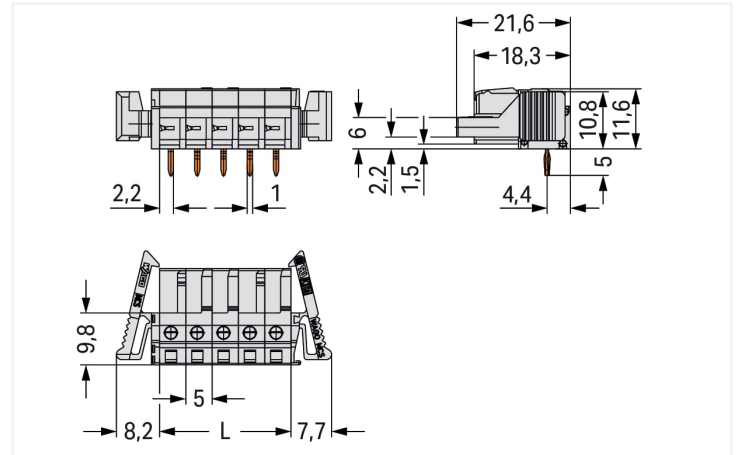
## Data Sheet | Item Number: 722-235/039-000

THT female header; angled; Pin spacing 5 mm; 5-pole; 100% protected against mismatching; Locking lever; 0.6 x 1.0 mm solder pin; light gray

<https://www.wago.com/722-235/039-000>



Color: ■ light gray

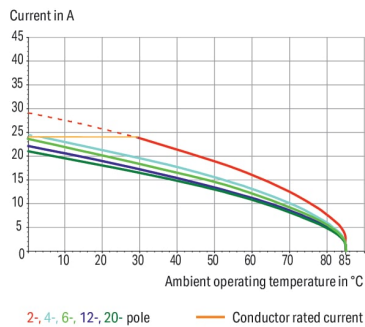


Dimensions in mm

L = pole no. x pin spacing

2-pole female connectors – one latch only

Derating Curve  
THT female header (722-232) with  
1-conductor male connector (721-602)  
Pin spacing: 5 mm / Conductor cross-section: 2.5 mm<sup>2</sup> "f-st"  
Based on: EN 60512-5-2 / Reduction factor: 0.8



- Horizontal or vertical PCB mounting via straight or angled solder pins
- For board-to-board and board-to-wire connections
- Touch-proof PCB outputs
- Easy-to-identify PCB inputs and outputs
- 100 % protected against mismatching
- With coding fingers

### 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	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV
Rated current	12 A	12 A	12 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

Clamping units	5
Total number of potentials	5
Number of connection types	1
Number of levels	1

Connection 1	
Pole number	5

## Physical data

Pin spacing	5 mm / 0.197 inches
Width	40.8 mm / 1.606 inches
Height	16.6 mm / 0.654 inches
Height from the surface	11.6 mm / 0.457 inches
Depth	18.25 mm / 0.719 inches
Solder pin length	5 mm
Solder pin dimensions	0.6 x 1 mm
Drilled hole diameter with tolerance	1.3 <sup>(+0.1)</sup> mm

## Mechanical data

Variable coding	Yes
Anti-rotation protection	Yes

## Plug-in connection

Contact type (pluggable connector)	Female connector/socket
Connector (connection type)	for PCB
Mismating protection	Yes
Mating direction to the PCB	0 °
Locking of plug-in connection	Locking lever

### PCB contact

PCB contact	THT
Solder pin arrangement	over the entire female 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	Copper alloy
Contact Plating	Tin
Fire load	0.104 MJ
Weight	5.5 g

### Environmental requirements

Limit temperature range	-60 ... +85 °C	<b>Environmental Testing (Environmental Conditions)</b>	
Processing temperature	-35 ... +60 °C	Test specification	DIN EN 50155 (VDE 0115-200):2022-06
		Railway applications – Rolling stock – Electronic equipment	
		Test procedure	DIN EN 61373 (VDE 0115-0106):2011-04
		Railway applications – Rolling stock equipment – Shock and vibration tests	
		Spectrum/Installation location	Service life test, Category 1, Class A/B
		Function test with noise-like vibration	Test passed according to Section 8 of the standard
		Frequency	$f_1 = 5 \text{ Hz to } f_2 = 150 \text{ Hz}$ $f_1 = 5 \text{ Hz to } f_2 = 150 \text{ Hz}$
		Acceleration	0.101g (highest test level used for all axes) 0.572g (highest test level used for all axes) 5g (highest test level used for all axes)
		Test duration per axis	10 min. 5 h
		Test directions	X, Y and Z axes X, Y and Z axes X, Y and Z axes
		Monitoring for contact faults/interruptions	Passed
		Voltage drop measurement before and after each axis	Passed
		Simulated service life test through increased levels of noise-like vibration	Test passed according to Section 9 of the standard
		Extended test scope: Monitoring for contact faults/interruptions	Passed Passed
		Extended test scope: Voltage drop measurement before and after each axis	Passed Passed
		Shock test	Test passed according to Section 10 of the standard
		Shock form	Half sine
		Shock duration	30 ms
		Number of shocks per axis	3 pos. und 3 neg.
		Vibration and shock stress for rolling stock equipment	Passed

**Commercial data**

Product Group	3 (Multi Conn. System)
eCl@ss 10.0	27-44-04-02
eCl@ss 9.0	27-44-04-02
ETIM 9.0	EC002637
ETIM 8.0	EC002637
PU (SPU)	50 pcs
Packaging type	Box
Country of origin	DE
GTIN	4044918580663
Customs tariff number	85366990990

**Environmental Product Compliance**

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

General approvals			Declarations of conformity and manufacturer's declarations		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CSA DEKRA Certification B.V.	C22.2	1466354	Railway WAGO GmbH & Co. KG	-	Railway Ready
UR Underwriters Laboratories Inc.	UL 1977	E45171			

**Downloads**




**Environmental Product Compliance**

Compliance Search	
Environmental Product Compliance 722-235/039-000	<a href="#">↓</a>



**Documentation**

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

## CAD/CAE-Data

CAD data	CAE data
2D/3D Models 722-235/039-000 	EPLAN Data Portal 722-235/039-000 
	ZUKEN Portal 722-235/039-000 

## PCB Design

Symbol and Footprint via SamacSys 722-235/039-000 
Symbol and Footprint via Ultra Librarian 722-235/039-000 

## 1 Compatible Products

## 1.1 System counterpart

## 1.1.1 Male connector/plug

**Item No.: 721-605**

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

## 1.2 Optional Accessories

## 1.2.1 Marking

## 1.2.1.1 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

## 1.2.2 Test and measurement

## 1.2.2.1 Testing accessories

**Item No.: 210-136**

Test plug; 2 mm Ø; with 500 mm cable; red

**Item No.: 231-661**

Test plugs for female connectors; for 5 mm and 5.08 mm pin spacing; 2,50 mm<sup>2</sup>; light gray