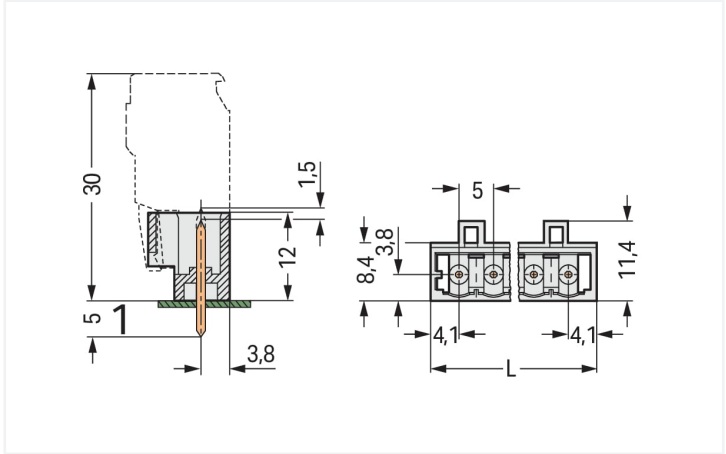


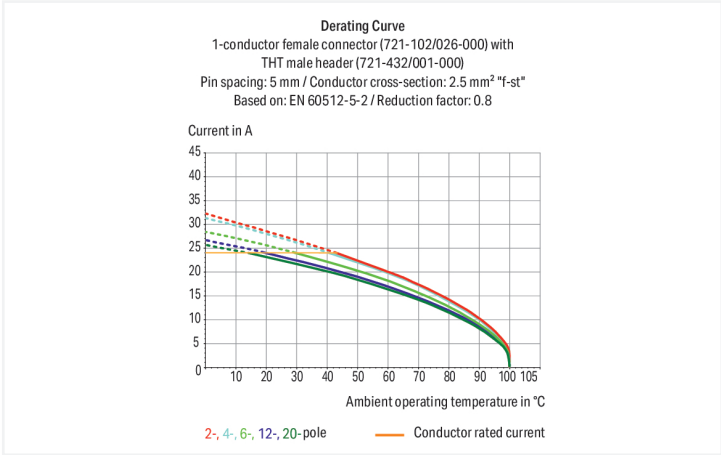
Data Sheet | Item Number: 721-139/001-000
THT male header; 1.0 x 1.0 mm solder pin; straight; 100% protected against mis-
mating; Pin spacing 5 mm; 9-pole; light gray
<https://www.wago.com/721-139/001-000>



Color: ■ light gray



Dimensions in mm
 $L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$



Stiftleiste Serieu00a0721 mit Lötstiftabmessungen 1 x 1 mm

Bei dieser Stiftleiste mit der Artikelnummer 721-139/001-000 ist eine ordentliche Elektroinstallation der Schwerpunkt. Mit unseren Leiterplatten-Steckverbindern bekommen Sie ein universelles Steckverbindersystem, das vielseitig eingesetzt werden kann: als Leiterplatten-Steckverbinder, als Durchführungssteckverbinder, als fliegende Steckverbindung für verschiedene Montagearten oder als Steckverbinder auf Reihenklemmen. Die Abmessungen sind in Breite x Höhe x Tiefe (48,2 x 17 x 11,4)u00a0mm. Die Oberfläche der Kontakte besteht aus Zinn. Das MCS – "Multi Connection System" von WAGO ist ein vielfältiges Steckverbindersystem für Ihre durchgängige Systemverdrahtung. Es ermöglicht Ihnen eine vereinfachte Verdrahtung in der Kabelvorkonfektionierung und auf Geräten durch zwei Betätigungsrichtungen für die CAGE CLAMP®-Varianten. Der Leiterplatten-Steckverbinder wird mittels THT verlötet.

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		10 A	-	10 A
Approvals per		UL 1977		
Rated voltage		600 V		
Rated current		10 A		
Approvals per		CSA		
Use group		B	C	D
Rated voltage		300 V	-	300 V
Rated current		10 A	-	10 A
Connection data				
Total number of potentials	9	Connection 1		
Number of connection types	1	Pole number	9	
Number of levels	1			
Physical data				
Pin spacing	5 mm / 0.197 inches			
Width	48.2 mm / 1.898 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	5 mm			
Solder pin dimensions	1 x 1 mm			
Drilled hole diameter with tolerance	1.4 ^(+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)	Information on material specifications can be found here
Color	light gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E _{CU})
Contact Plating	Tin
Fire load	0.053 MJ
Weight	2.9 g

Environmental requirements	
Limit temperature range	-60 ... +100 °C
Processing temperature	-35 ... +60 °C
Environmental Testing (Environmental Conditions)	
Test specification Railway applications – Rolling stock – Electronic equipment	DIN EN 50155 (VDE 0115-200):2022-06
Test procedure Railway applications – Rolling stock equipment – Shock and vibration tests	DIN EN 61373 (VDE 0115-0106):2011-04
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 Hz to f ₂ = 150 Hz f ₁ = 5 Hz to f ₂ = 150 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)	100 pcs	
Packaging type	Box	
Country of origin	PL	
GTIN	4044918869027	
Customs tariff number	85366930000	

Environmental Product Compliance		
RoHS Compliance Status	Compliant, No Exemption	

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
   					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-113351	Railway WAGO GmbH & Co. KG	-	Railway Ready
CSA DEKRA Certification B.V.	C22.2	1466354			
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-121453			
UL Underwriters Laboratories Inc.	UL 1059	UL-US- L45172-6187117-81111991-1			
UR Underwriters Laboratories Inc.	UL 1977	E45171			

Approvals for marine applications

  		
Approval	Standard	Certificate Name
ABS American Bureau of Ship- ping	-	19-HG1869876-PDA
BV Bureau Veritas S.A.	IEC 60998	11915/D0 BV
DNV DNV GL SE	-	TAE000016Z



Downloads			
Environmental Product Compliance			
Compliance Search			
Environmental Product Compliance	721-139/001-000		
Documentation			
Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	
CAD/CAE-Data			
CAD data		CAE data	
2D/3D Models	721-139/001-000	EPLAN Data Portal	721-139/001-000
		ZUKEN Portal	721-139/001-000
PCB Design			
Symbol and Footprint	via SamacSys		
	721-139/001-000		
Symbol and Footprint	via Ultra Librarian		
	721-139/001-000		
1 Compatible Products			
1.1 System counterpart			
1.1.1 Female connector/socket			
Item No.: 722-109/026-000 1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9-pole; 100% protected against mismatching; 2,50 mm²; light gray	Item No.: 722-209/026-000 1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9-pole; 100% protected against mismatching; 2,50 mm²; light gray	Item No.: 721-309/031-000 1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9-pole; 100% protected against mismatching; clamping collar; 2,50 mm²; light gray	Item No.: 721-309/008-000 1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9-pole; 100% protected against mismatching; Snap-in mounting feet; 2,50 mm²; light gray
Item No.: 721-109/026-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9-pole; 100% protected against mismatching; 2,50 mm²; light gray	Item No.: 721-109/027-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9-pole; 100% protected against mismatching; clamping collar; 2,50 mm²; light gray	Item No.: 721-109/031-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9-pole; 100% protected against mismatching; clamping collar; 2,50 mm²; light gray	Item No.: 721-109/037-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9-pole; 100% protected against mismatching; Lateral locking levers; 2,50 mm²; light gray
Item No.: 2721-109/026-000 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9-pole; 100% protected against mismatching; 2,50 mm²; light gray	Item No.: 2721-109/031-000 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9-pole; 100% protected against mismatching; clamping collar; 2,50 mm²; light gray	Item No.: 2721-109/037-000 1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9-pole; 100% protected against mismatching; Lateral locking levers; 2,50 mm²; light gray	Item No.: 721-2109/037-000 2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9-pole; 100% protected against mismatching; Lateral locking levers; 2,50 mm²; light gray

1.1.1 Female connector/socket



Item No.: 721-2109/026-000
2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 9-pole; 100% protected against mis-mating; with integrated end plate; 2,50 mm²; 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



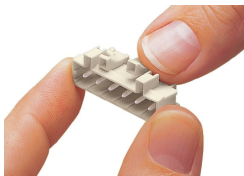
Item No.: 210-833
Marking strips; 25 m on roll; 6 mm wide; plain; Self-adhesive; white



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).