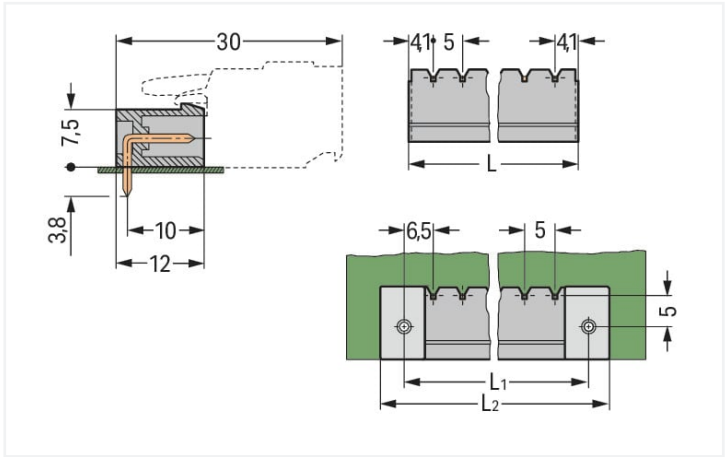
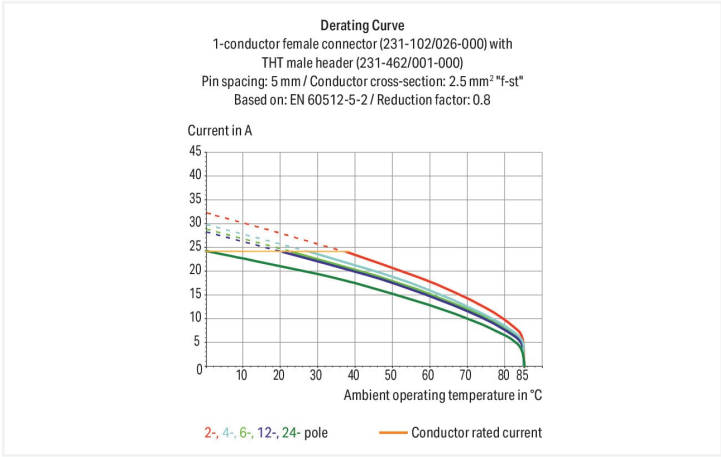




Color: ■ gray



Dimensions in mm
 $L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$
 $L1 = L + 5 \text{ mm}$
 $L2 = L1 + 7.4 \text{ mm}$



- Horizontal or vertical PCB mounting via straight or angled solder pins
- Pin cross-section: 1 x 1 mm
- 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		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	10	Connection 1		
Number of connection types	1	Pole number	10	
Number of levels	1			
Physical data				
Pin spacing	5 mm / 0.197 inches			
Width	53.2 mm / 2.094 inches			
Height	12.2 mm / 0.48 inches			
Height from the surface	8.4 mm / 0.331 inches			
Depth	12 mm / 0.472 inches			
Solder pin length	3.8 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	No			
Mating direction to the PCB	0°			
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	gray
Material group	I
Insulation material	Polyamide (PA66)
Flammability class per UL94	V0
Contact material	Electrolytic copper (E _{Cu})
Contact plating	Tin
Fire load	0.105 MJ
Weight	3.2 g

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

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 8.0	EC002637
ETIM 7.0	EC002637
PU (SPU)	100 pcs
Packaging type	Box
Country of origin	PL
GTIN	4044918866323
Customs tariff number	85366930000

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
CB DEKRA Certification B.V.	IEC 61984	NL-39756/A1
CSA DEKRA Certification B.V.	C22.2	1466354
KEMA/KEUR DEKRA Certification B.V.	EN 61984	71-121453
UL Underwriters Laboratories Inc.	UL 1059	E45172
UR Underwriters Laboratories Inc.	UL 1977	E45171

Declarations of conformity and manufacturer's declarations



Approval	Standard	Certificate Name
Railway WAGO GmbH & Co. KG	-	Railway Ready



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 231-440/001-000	

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2010.85 KB	

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 231-440/001-000	EPLAN Data Portal 231-440/001-000
	ZUKEN Portal 231-440/001-000
	

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket

			
Item No.: 232-110/026-000 1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; 2,50 mm²; gray	Item No.: 232-210/026-000 1-conductor female connector, angled; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; 2,50 mm²; gray	Item No.: 231-110/026-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10- pole; 2,50 mm²; gray	Item No.: 231-110/027-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10- pole; clamping collar; 2,50 mm²; gray
			
Item No.: 231-110/031-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10- pole; clamping collar; 2,50 mm²; gray	Item No.: 231-110/037-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10- pole; Lateral locking levers; 2,50 mm²; gray	Item No.: 231-110/125-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10- pole; Snap-in flange; 2,50 mm²; gray	Item No.: 231-110/102-000 1-conductor female connector; CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10- pole; with integrated end plate; 2,50 mm²; gray

1.1.1 Female connector/socket



Item No.: 2231-1110/327-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; 2,50 mm²; gray



Item No.: 2231-1110/038-000
1-conductor female connector; lever; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; Lateral locking levers; 2,50 mm²; gray



Item No.: 2231-1110/026-000
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; 2,50 mm²; gray



Item No.: 2231-1110/031-000
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; clamping collar; 2,50 mm²; gray



Item No.: 2231-1110/037-000
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; Lateral locking levers; 2,50 mm²; gray



Item No.: 2231-1110/102-000
1-conductor female connector; push-button; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; with integrated end plate; 2,50 mm²; gray



Item No.: 231-2110/037-000
2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; Lateral locking levers; 2,50 mm²; gray



Item No.: 231-2110/026-000
2-conductor female connector; Push-in CAGE CLAMP®; 2.5 mm²; Pin spacing 5 mm; 10-pole; with integrated end plate; 2,50 mm²; 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

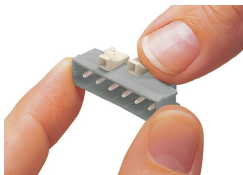
1.2.2.1 Mounting accessories



Item No.: 231-193
Locking device; for male connectors; 1 part; gray

Installation Notes

Coding



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