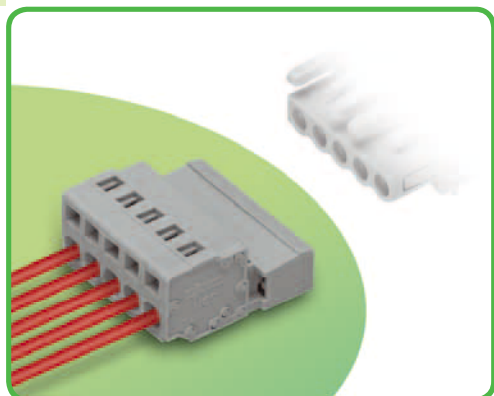


## Male Connectors

### Pin spacing 5 mm, 5.08 mm

### MCS-MIDI Classic



- Universal connection for all conductor types
- Easy cable pre-assembly and on-unit wiring via vertical and horizontal CAGE CLAMP® actuation
- For “wire-to-wire” and “board-to-wire” connections
- Versions available with snap-in mounting feet or fixing flanges for panel or through-panel mounting
- With coding keys

#### Technical data:

Pin Spacing	5 mm 0.197 in			5.08 mm 0.2 in		
	IEC/EN 60664-1			IEC/EN 60664-1		
Rating based on	IEC/EN 60664-1			IEC/EN 60664-1		
Overtoltage category	III	III	II	III	III	II
Pollution degree	3	2	2	3	2	2
Rated voltage	320 V	320 V	630 V	320 V	320 V	630 V
Rated surge voltage	4 kV	4 kV	4 kV	4 kV	4 kV	4 kV
Nominal current	12 A	12 A	12 A	12 A	12 A	12 A
Approvals per	UL/CSA			UL/CSA		
Use group UL 1059	B	C	D	B	C	D
Rated voltage	300 V	-	300 V	300 V	-	300 V
Nominal current UL	15 A	-	10 A	15 A	-	10 A
Nominal current CSA	15 A	-	10 A	15 A	-	10 A

The MCS-MIDI connection system is UL 1977 approved and capable of up to 600 V for factory wiring.

#### Conductor data:

Connection technology	CAGE CLAMP®	
Conductor cross section: solid	0.08 - 2.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.08 - 2.5 mm <sup>2</sup>	
Conductor size: fine-stranded	0.25 - 1.5 mm <sup>2</sup> (with insulated ferrule)	
Conductor size: fine-stranded	0.25 - 2.5 mm <sup>2</sup> (with uninsulated ferrule)	
AWG	28 - 12	12: THHN, THWN
Strip length	8 - 9 mm / 0.31 - 0.35 in	

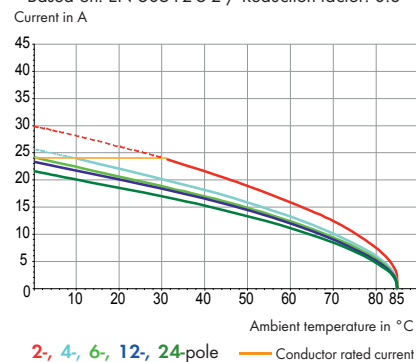
#### Material data:

Material group	I
Insulating material	Nylon 6.6 (PA 6.6)
Flammability rating per UL 94	V0
Lower/Upper temperature limit	-60°C / +100°C
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>co</sub> )
Contact plating	tin-plated
MCS connectors are also available upon request with gold-plated or partially gold-plated contact surfaces.	
Depending on the version requested, “item no. suffix . . . /010-000” is added to the “basic item no.”	

MCS - MULTI CONNECTION SYSTEM includes connectors **without** breaking capacity in accordance with IEC 61984. When used as intended, these connectors shall not be connected/disconnected when live or under load. The circuit design should ensure header pins, which can be touched, are not live in unmated condition.

#### Derating Curve

231-102/026-000 female connector  
with 231-602 male connector  
Pin spacing: 5 mm / Conductor size: 2.5 mm<sup>2</sup> “F-st”  
Based on: EN 60512-5-2 / Reduction factor: 0.8



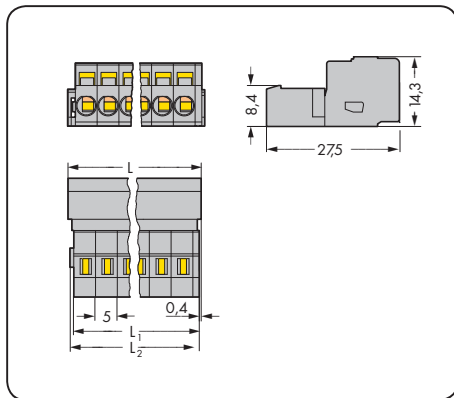
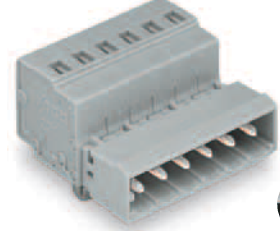
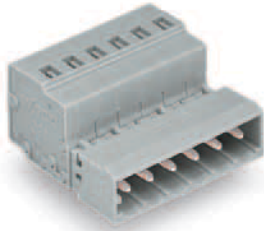
#### MCS-MIDI accessories:

#### Page:

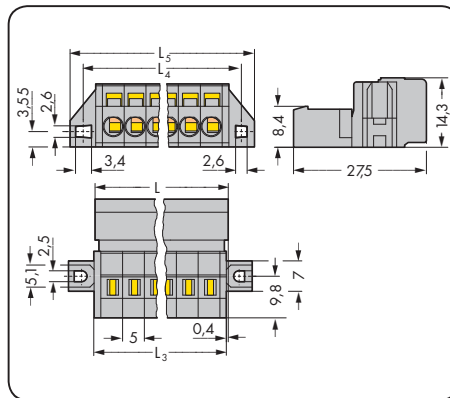
Marking accessories	540 - 543
Operating tools	466 - 467
Separators	468
Comb-style jumper bars	476
Insulation stop	469
Coding keys	468
Screws	546
Strain relief housing	472 - 473
Strain relief plates	470 - 471

# Male Connectors MCS-MIDI Classic

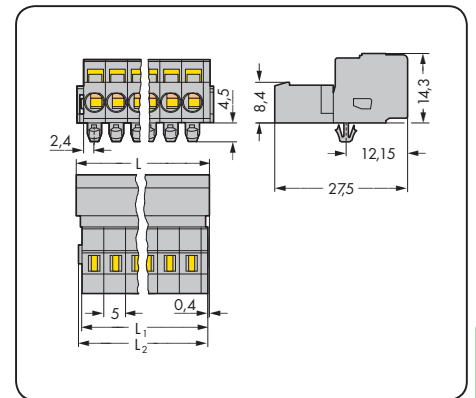
Pin spacing 5 mm / 0.197 in		With fixing flanges Pin spacing 5 mm / 0.197 in		With snap-in mounting feet Pin spacing 5 mm / 0.197 in	
0.08 - 2.5 mm <sup>2</sup>	AWG 28 - 12	0.08 - 2.5 mm <sup>2</sup>	AWG 28 - 12	0.08 - 2.5 mm <sup>2</sup>	AWG 28 - 12
320 V/4 kV/2 12 A	300 V/15 A	320 V/4 kV/2 12 A	300 V/15 A	320 V/4 kV/2 12 A	300 V/15 A



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$   
 $L_1 = L - 1.7 \text{ mm}$   
 $L_2 = L - 1.2 \text{ mm}$



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$   
 $L_3 = L - 0.2 \text{ mm}$   
 $L_4 = L_3 + 5.8 \text{ mm}$   
 $L_5 = L_3 + 11.8 \text{ mm}$



$L = (\text{pole no.} - 1) \times \text{pin spacing} + 8.2 \text{ mm}$   
 $L_1 = L - 1.7 \text{ mm}$   
 $L_2 = L - 1.2 \text{ mm}$

Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit	Pole No.	Item No.	Pack. Unit
Male connector, gray			Male connector with fixing flanges, gray			Male connector with snap-in mounting feet, for 0.6 - 1.2 mm plate thickness, Ø 3.5 mm mounting holes, gray		
2	231-602	100	2	231-602/019-000	100	2	231-602/018-000	100
3	231-603	100	3	231-603/019-000	50	3	231-603/018-000	100
4	231-604	100	4	231-604/019-000	50	4	231-604/018-000	100
5	231-605	50	5	231-605/019-000	50	5	231-605/018-000	50
6	231-606	50	6	231-606/019-000	50	6	231-606/018-000	50
7	231-607	50	7	231-607/019-000	50	7	231-607/018-000	50
8	231-608	50	8	231-608/019-000	50	8	231-608/018-000	50
9	231-609	50	9	231-609/019-000	25	9	231-609/018-000	50
10	231-610	50	10	231-610/019-000	25	10	231-610/018-000	50
11	231-611	25	11	231-611/019-000	25	11	231-611/018-000	25
12	231-612	25	12	231-612/019-000	25	12	231-612/018-000	25
13	231-613	25	13	231-613/019-000	25	13	231-613/018-000	25
14	231-614	25	14	231-614/019-000	25	14	231-614/018-000	25
15	231-615	25	15	231-615/019-000	25	15	231-615/018-000	25
16	231-616	25	16	231-616/019-000	10	16	231-616/018-000	25
17	231-617	25	17	231-617/019-000	10	17	231-617/018-000	25
18	231-618	25	18	231-618/019-000	10	18	231-618/018-000	25
19	231-619	10	19	231-619/019-000	10	19	231-619/018-000	10
20	231-620	10	20	231-620/019-000	10	20	231-620/018-000	10
21	231-621	10	21	231-621/019-000	10	21	231-621/018-000	10
22	231-622	10	22	231-622/019-000	10	22	231-622/018-000	10
23	231-623	10	23	231-623/019-000	10	23	231-623/018-000	10
24	231-624	10	24	231-624/019-000	10	24	231-624/018-000	10

For cutout dimensions, see page 484, table 1.

Product Accessories	Page
Mounting adapter for DIN 35 rail, min. length 3 poles (209-137)	475