



Number of contacts	Standard	3	4	5	5	6	7	7	8	12	14	14	19
Contact arrangement	IEC 61076-2-106	03-a	04-a	05-a	05-b	06-a	07-a	07-b	08-a	12-a	14-a	14-b	19-a
Contact arrangement	IEC 60130-9 ¹⁾	yes	no	yes	no	yes	no	yes	no				
Rated voltage ²⁾	IEC 60664-1	300 V (100 V)	300 V (63 V)	100 V (32 V)	300 V (63 V)	100 V (32 V)	100 V (32 V)	150 V (32 V)	60 V (32 V)				
Rated voltage	UL 1977	250V							60V				
Rated impulse withstand voltage ²⁾	IEC 60664-1	1500 V (1500 V)	1200 V (800 V)	1500 V (1500 V)					1200 V (800 V)				
Pollution degree ²⁾	IEC 60664-1	1 (3 ³⁾)											
Installation category	IEC 60664-1	I											
Insulation group	IEC 60664-1	II, 400 ≤ CTI < 600											
Current rating	IEC 60512-5-2 UL 1977	10A/+40°C	7A/+40°C						3A/+40°C				
Insulation resistance	IEC 60512-3-1	>10 ¹⁰ Ohm ⁴⁾											
Contact resistance	IEC 60512-2-1	<5mOhm											
Climatic category	IEC 60668-1	40 / 100 / 56											
Temperatur range	IEC 60668-1	-40°C...+100°C / -40°F...+212°F											
Salt spray resistance	DIN IEC 60068-2-11, test Ka	720h											
IP degree	IEC 60529	IP 69K / IP 67 / IP 65 (in mated condition)											
Insertion and withdrawal force	IEC 60512-13-2	25N	30N	35N	35N	50N	55N	55N	60N	50N	50N	50N	60N
mechanical operation	IEC 60512-9-1	Silver ≥500 mating cycles / Gold ≥1000 mating cycles											
housing material		brass and / or zinc die cast, nickel plated											
dielectric material		thermoplastic											
sealing material		Chloroprene											
contacts		silver or gold plated											
termination technique		solder											
wire gauge		≤0,5mm ² / 20 AWG						≤0,35mm ² / 22 AWG					
flamability		UL 94 V0											
locking system	IEC 60130-9 DIN EN 61076-2-106	metal screw coupling; tightening torque 0,7 - 1,5 Nm											

	19 (19-a)	C091 31F019 101 2 U	C091 31F019 201 2 U
	14 (14-b)	C091 31F114 101 2 U	C091 31F114 201 2 U
	14 (14-a)	C091 31F014 101 2 U	C091 31F014 201 2 U
	12 (12-a)	C091 31F012 101 2 U	C091 31F012 201 2 U
	8 (08-a)	C091 31F008 101 2 U	C091 31F008 201 2 U
	7 (07-b)	C091 31F107 101 2 U	C091 31F107 201 2 U
	7 (07-a)	C091 31F007 101 2 U	C091 31F007 201 2 U
	6 (06-a)	C091 31F006 101 2 U	C091 31F006 201 2 U
	5 (05-b)	C091 31F105 101 2 U	C091 31F105 201 2 U
	5 (05-a)	C091 31F005 101 2 U	C091 31F005 201 2 U
	4 (04-a)	C091 31F004 101 2 U	C091 31F004 201 2 U
	3 (03-a)	C091 31F003 101 2 U	C091 31F003 201 2 U

Contact arrangement View on mating side	Number of contacts (Contact arrangement acc. IEC 61076-2-106)	Part number-Ag	Part number-Au
Gewicht (errechnet) / Calc WT : 71,2 g Prüfmaß / Testdimension Teileindex / Partindexnumber: Bagatelle change:		Zul. Abw./Tolerances : ISO 2768-c DIN / ISO 13715	
Maßstab / Scale : 1:1 A3		CUSTOMER DRAWING	
Gez. Drawn 19.08.2020 MCARLE Status Released Gepr. 02.03.2021 MBERTSCH Checked		Female cable connector r/a for cable diameter 6-8mm	
03 202100006 01.03.2021 MCARLE 02 202000083 26.10.2020 MCARLE		Amphenol Tuchel Industrial GmbH	
Index Änderung/Description Datum/Date Name		M C091 31FXXX X01 2 U Blatt/Sheet 1 1 Bl.	
		Ers. f. l. Replacement for : M-C091 31FXXX X01 2 U Rev01	

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¹⁾ Edition 2000-05
²⁾ values in brackets are according to DIN EN 61076-2-106
³⁾ designed acc. pollution degree 2, can be used under pollution degree 3 when the rules of IEC 60644-1 are fulfilled
⁴⁾ under operating conditions >10⁸ Ohm
 Do not connect or disconnect under load Metal housing parts shall be securely incorporated to protected ground
 Remark for gold plated contacts:
 In order to avoid brittle inter-metallic connections, gold plated terminals have to be tin-plated in the solder area.
 All technical data have been measured in a laboratory environment and can be different during practical usage of the product. Any product information is for descriptive usage only and not legally binding, particularly the information does not constitute or provide any legal guaranties ("Beschaffenheitsgarantie" or "Haltbarkeitsgarantie").