



Recommended roughness sealing surface Rz6,3 (Ra0,8)

\*for 12, 14 and 19 pol = 7,2

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 <sup>1)</sup>	yes		no		yes		no		no				
Rated voltage <sup>2)</sup>	IEC 60664-1	300 V (100 V)		300 V (63 V)		100 V (32 V)		300 V (63 V)		100 V (32 V)		150 V (32 V) 60 V (32 V)		
Rated voltage	UL 1977	250V								60V				
Rated impulse withstand voltage <sup>2)</sup>	IEC 60664-1	1500 V (1500 V)		1200 V (800 V)		1500 V (1500 V)		1200 V (800 V)						
Pollution degree <sup>2)</sup>	IEC 60664-1	1 (3 <sup>3)</sup> )												
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 <sup>10</sup> Ohm <sup>4)</sup>												
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 <sup>2</sup> / 20 AWG								≤0,35mm <sup>2</sup> / 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												

Gewicht (errechnet) / Calc WT: 14,905 g	Zul. Abw./Tolerances:
Prüfmaß / Testdimension	ISO 2768-c
Teileindex / Partindexnumber:	DIN / ISO 13715
Bagatelle change:	

Gez. Drawn	10.06.2020
MCARLE	
Status	Released
Gepr. Checked	07.09.2023
MCARLE	

Maßstab / Scale: 2:1	A3	
<b>CUSTOMER DRAWING</b>		

	19 (19-a)	Ag	C091 31W019 100 2 U	
		Au	C091 31W019 200 2 U	
	14 (14-b)	Ag	C091 31W114 100 2 U	
		Au	C091 31W114 200 2 U	
	14 (14-a)	Ag	C091 31W014 100 2 U	
		Au	C091 31W014 200 2 U	
	12 (12-a)	Ag	C091 31W012 100 2 U	
		Au	C091 31W012 200 2 U	
	8 (08-a)	Ag	C091 31W008 100 2 U	
		Au	C091 31W008 200 2 U	
	7 (07-b)	Ag	C091 31W107 100 2 U	
		Au	C091 31W107 200 2 U	
	7 (07-a)	Ag	C091 31W007 100 2 U	
		Au	C091 31W007 200 2 U	
	6 (6-a)	Ag	C091 31W006 100 2 U	
		Au	C091 31W006 200 2 U	
	5 (05-b)	Ag	C091 31W105 100 2 U	
		Au	C091 31W105 200 2 U	
	5 (05-a)	Ag	C091 31W005 100 2 U	
		Au	C091 31W005 200 2 U	
	4 (04-a)	Ag	C091 31W004 100 2 U	
		Au	C091 31W004 200 2 U	
	3 (03-a)	Ag	C091 31W003 100 2 U	
		Au	C091 31W003 200 2 U	
	2 (Pin 1+3)	Ag	C091 31W002 100 2 U	
		Au	C091 31W002 200 2 U	
	Contact arrangement View on mating side	Number of contacts (Contact arrangement acc. DIN EN 61076-2-106)	contact plating	Part number

<sup>1)</sup> Edition 2000-05  
<sup>2)</sup> values in brackets are according to DIN EN 61076-2-106  
<sup>3)</sup> designed acc. pollution degree 2, can be used under pollution degree 3 when the rules of IEC 60644-1 are fulfilled  
<sup>4)</sup> under operating conditions >10<sup>8</sup> 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 ("Beschaffungsgarantie" or "Haltbarkeitsgarantie").

02	202300020	07.09.2023	MKELB
01	202000083	26.10.2020	MCARLE
Index	Änderung/Description	Datum/Date	Name

<b>Amphenol Tuchel Industrial GmbH</b>		M	C091 31WXXX X00 2 U	Blatt/Sheet 1
Ers. f. / Replacement for:				1 Bl.

Copying of this document and giving it to others and the use or communication of the contents thereof, are forbidden without express authority. Offenders are liable to the payment of damages. All rights are reserved in the event of the grant of a patent or the registration of the utility model or design.

Weitergabe sowie Vervielfältigung dieser Unterlage, Verwertung und Mitteilung ihres Inhalts nicht gestattet, soweit nicht ausdrücklich zugestanden. Zuwiderhandlungen verpflichten zu Schadensersatz. Alle Rechte für den Fall der Patenterteilung oder Gebrauchsmuster-Eintragung vorbehalten.

FAI2023-002398 NXM-V01