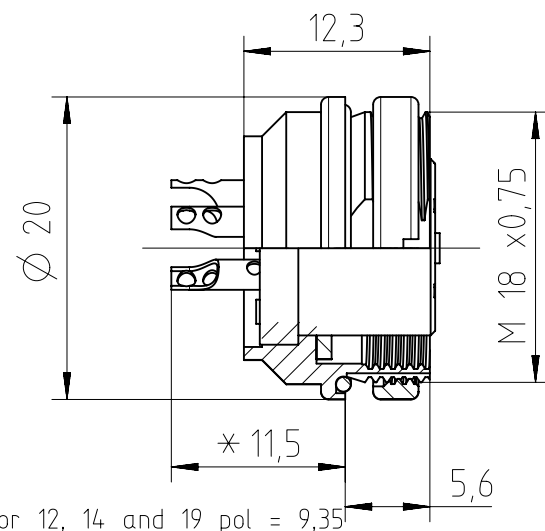


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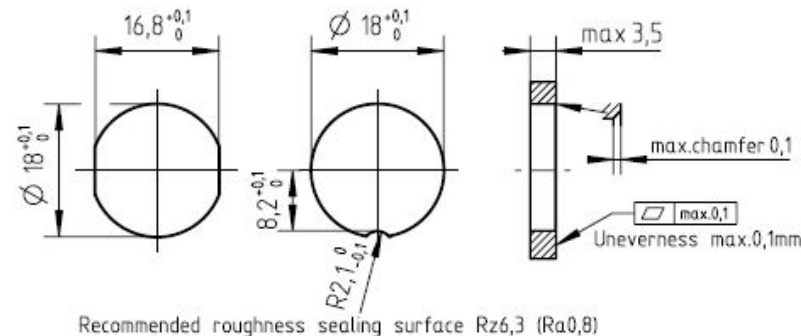
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Panel Cutout M1:1

Alternative 1 Alternative 2



*for 12, 14 and 19 pol = 9,35

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 ^b	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Rated voltage ^{a)}	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)	60 V (32 V)	150 V (32 V)	60 V (32 V)	150 V (32 V)	60 V (32 V)
Rated voltage	UL 1977	250V	250V	250V	250V	250V	250V	250V	250V	250V	250V	250V	250V
Rated impulse withstand voltage ^{a)}	IEC 60664-1	1500 V (1500 V)	1200 V (800 V)	1500 V (1500 V)	1200 V (800 V)	1500 V (1500 V)	1200 V (800 V)	1500 V (1500 V)	1200 V (800 V)	1500 V (1500 V)	1200 V (800 V)	1500 V (1500 V)	1200 V (800 V)
Pollution degree ^{a)}	IEC 60664-1	1 (3 ^{b)})	1 (3 ^{b)})	1 (3 ^{b)})	1 (3 ^{b)})	1 (3 ^{b)})	1 (3 ^{b)})	1 (3 ^{b)})	1 (3 ^{b)})	1 (3 ^{b)})	1 (3 ^{b)})	1 (3 ^{b)})	1 (3 ^{b)})
Installation category	IEC 60664-1	I	I	I	I	I	I	I	I	I	I	I	I
Insulation group	IEC 60664-1	II, 400 ≤ CTI < 600	II, 400 ≤ CTI < 600	II, 400 ≤ CTI < 600	II, 400 ≤ CTI < 600	II, 400 ≤ CTI < 600	II, 400 ≤ CTI < 600	II, 400 ≤ CTI < 600	II, 400 ≤ CTI < 600	II, 400 ≤ CTI < 600	II, 400 ≤ CTI < 600	II, 400 ≤ CTI < 600	II, 400 ≤ CTI < 600
Current rating	IEC 60512-5-2 UL 1977	10A/+40°C	7A/+40°C	7A/+40°C	7A/+40°C	7A/+40°C	7A/+40°C	7A/+40°C	7A/+40°C	7A/+40°C	7A/+40°C	7A/+40°C	7A/+40°C
Insulation resistance	IEC 60512-3-1	>10 ¹⁰ Ohm ^{a)}	>10 ¹⁰ Ohm ^{a)}	>10 ¹⁰ Ohm ^{a)}	>10 ¹⁰ Ohm ^{a)}	>10 ¹⁰ Ohm ^{a)}	>10 ¹⁰ Ohm ^{a)}	>10 ¹⁰ Ohm ^{a)}	>10 ¹⁰ Ohm ^{a)}	>10 ¹⁰ Ohm ^{a)}	>10 ¹⁰ Ohm ^{a)}	>10 ¹⁰ Ohm ^{a)}	>10 ¹⁰ Ohm ^{a)}
Contact resistance	IEC 60512-2-1	<5mOhm	<5mOhm	<5mOhm	<5mOhm	<5mOhm	<5mOhm	<5mOhm	<5mOhm	<5mOhm	<5mOhm	<5mOhm	<5mOhm
Climatic category	IEC 60668-1	40 / 100 / 56	40 / 100 / 56	40 / 100 / 56	40 / 100 / 56	40 / 100 / 56	40 / 100 / 56	40 / 100 / 56	40 / 100 / 56	40 / 100 / 56	40 / 100 / 56	40 / 100 / 56	40 / 100 / 56
Temperatur range	IEC 60668-1	-40°C...+100°C / -40°F...+212°F	-40°C...+100°C / -40°F...+212°F	-40°C...+100°C / -40°F...+212°F	-40°C...+100°C / -40°F...+212°F	-40°C...+100°C / -40°F...+212°F	-40°C...+100°C / -40°F...+212°F	-40°C...+100°C / -40°F...+212°F	-40°C...+100°C / -40°F...+212°F	-40°C...+100°C / -40°F...+212°F	-40°C...+100°C / -40°F...+212°F	-40°C...+100°C / -40°F...+212°F	-40°C...+100°C / -40°F...+212°F
Salt spray resistance	DIN IEC 60068-2-11, test Ka	720h	720h	720h	720h	720h	720h	720h	720h	720h	720h	720h	720h
IP degree	IEC 60529	IP 69K / IP 67 / IP 65 (in mated condition)	IP 69K / IP 67 / IP 65 (in mated condition)	IP 69K / IP 67 / IP 65 (in mated condition)	IP 69K / IP 67 / IP 65 (in mated condition)	IP 69K / IP 67 / IP 65 (in mated condition)	IP 69K / IP 67 / IP 65 (in mated condition)	IP 69K / IP 67 / IP 65 (in mated condition)	IP 69K / IP 67 / IP 65 (in mated condition)	IP 69K / IP 67 / IP 65 (in mated condition)	IP 69K / IP 67 / IP 65 (in mated condition)	IP 69K / IP 67 / IP 65 (in mated condition)	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	Silver ≥500 mating cycles / Gold ≥1000 mating cycles	Silver ≥500 mating cycles / Gold ≥1000 mating cycles	Silver ≥500 mating cycles / Gold ≥1000 mating cycles	Silver ≥500 mating cycles / Gold ≥1000 mating cycles	Silver ≥500 mating cycles / Gold ≥1000 mating cycles	Silver ≥500 mating cycles / Gold ≥1000 mating cycles	Silver ≥500 mating cycles / Gold ≥1000 mating cycles	Silver ≥500 mating cycles / Gold ≥1000 mating cycles	Silver ≥500 mating cycles / Gold ≥1000 mating cycles	Silver ≥500 mating cycles / Gold ≥1000 mating cycles	Silver ≥500 mating cycles / Gold ≥1000 mating cycles
housing material		brass and / or zinc die cast, nickel plated	brass and / or zinc die cast, nickel plated	brass and / or zinc die cast, nickel plated	brass and / or zinc die cast, nickel plated	brass and / or zinc die cast, nickel plated	brass and / or zinc die cast, nickel plated	brass and / or zinc die cast, nickel plated	brass and / or zinc die cast, nickel plated	brass and / or zinc die cast, nickel plated	brass and / or zinc die cast, nickel plated	brass and / or zinc die cast, nickel plated	brass and / or zinc die cast, nickel plated
dielectric material		thermoplastic	thermoplastic	thermoplastic	thermoplastic	thermoplastic	thermoplastic	thermoplastic	thermoplastic	thermoplastic	thermoplastic	thermoplastic	thermoplastic
sealing material		Chloroprene	Chloroprene	Chloroprene	Chloroprene	Chloroprene	Chloroprene	Chloroprene	Chloroprene	Chloroprene	Chloroprene	Chloroprene	Chloroprene
contacts		silver or gold plated	silver or gold plated	silver or gold plated	silver or gold plated	silver or gold plated	silver or gold plated	silver or gold plated	silver or gold plated	silver or gold plated	silver or gold plated	silver or gold plated	silver or gold plated
termination technique		solder	solder	solder	solder	solder	solder	solder	solder	solder	solder	solder	solder
wire gauge		≤0,5mm ² / 20 AWG	≤0,5mm ² / 20 AWG	≤0,5mm ² / 20 AWG	≤0,5mm ² / 20 AWG	≤0,5mm ² / 20 AWG	≤0,5mm ² / 20 AWG	≤0,5mm ² / 20 AWG	≤0,5mm ² / 20 AWG	≤0,5mm ² / 20 AWG	≤0,5mm ² / 20 AWG	≤0,5mm ² / 20 AWG	≤0,5mm ² / 20 AWG
flamability		UL 94 V0	UL 94 V0	UL 94 V0	UL 94 V0	UL 94 V0	UL 94 V0	UL 94 V0	UL 94 V0	UL 94 V0	UL 94 V0	UL 94 V0	UL 94 V0
locking system	IEC 60130-9 DIN EN 61076-2-106	metal screw coupling; tightening torque 0,7 - 1,5 Nm	metal screw coupling; tightening torque 0,7 - 1,5 Nm	metal screw coupling; tightening torque 0,7 - 1,5 Nm	metal screw coupling; tightening torque 0,7 - 1,5 Nm	metal screw coupling; tightening torque 0,7 - 1,5 Nm	metal screw coupling; tightening torque 0,7 - 1,5 Nm	metal screw coupling; tightening torque 0,7 - 1,5 Nm	metal screw coupling; tightening torque 0,7 - 1,5 Nm	metal screw coupling; tightening torque 0,7 - 1,5 Nm	metal screw coupling; tightening torque 0,7 - 1,5 Nm	metal screw coupling; tightening torque 0,7 - 1,5 Nm	metal screw coupling; tightening torque 0,7 - 1,5 Nm

^{a)} Edition 2000-05
^{b)} values in brackets are according to DIN EN 61076-2-106
^{c)} designed acc. pollution degree 2, can be used under pollution degree 3 when the rules of IEC 60644-1 are fulfilled
^{d)} 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").

	19 (19-a)	C091 31G019 100 2 U	C091 31G019 200 2 U
	14 (14-b)	C091 31G114 100 2 U	C091 31G114 200 2 U
	14 (14-a)	C091 31G014 100 2 U	C091 31G014 200 2 U
	12 (12-a)	C091 31G012 100 2 U	C091 31G012 200 2 U
	8 (08-a)	C091 31G008 100 2 U	C091 31G008 200 2 U
	7 (07-b)	C091 31G107 100 2 U	C091 31G107 200 2 U
	7 (07-a)	C091 31G007 100 2 U	C091 31G007 200 2 U
	6 (06-a)	C091 31G006 100 2 U	C091 31G006 200 2 U
	5 (05-b)	C091 31G105 100 2 U	C091 31G105 200 2 U
	5 (05-a)	C091 31G005 100 2 U	C091 31G005 200 2 U
	4 (04-a)	C091 31G004 100 2 U	C091 31G004 200 2 U
	3 (03-a)	C091 31G003 100 2 U	C091 31G003 200 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: 13,657 g	Zul. Abw./Tolerances:	Maßstab / Scale: 2:1	A3	
Prüfmaß / Testdimension	ISO 2768-c	CUSTOMER DRAWING		
Teileindex / Partindexnumber:				
Bagatelle change: 09.02.2021 MCARLE				
Gez. Drawn: 08.06.2017				
Status: Released				
Gepr. 11.01.2021				
Checked: MBERTSCH				
04 202000083 26.10.2020 MCARLE				
03 201700004 12.06.2017 NPFEI				
Index Änderung / Description Datum / Date Name				
Amphenol Tuchel Industrial GmbH		M C091 31GXXX X00 2 U		Blatt / Sheet 1
Ers. f. / Replacement for: M-C091 31GXXX X00 2 Rev02				1 Bl.

FAI2020-001870
NXM-V03