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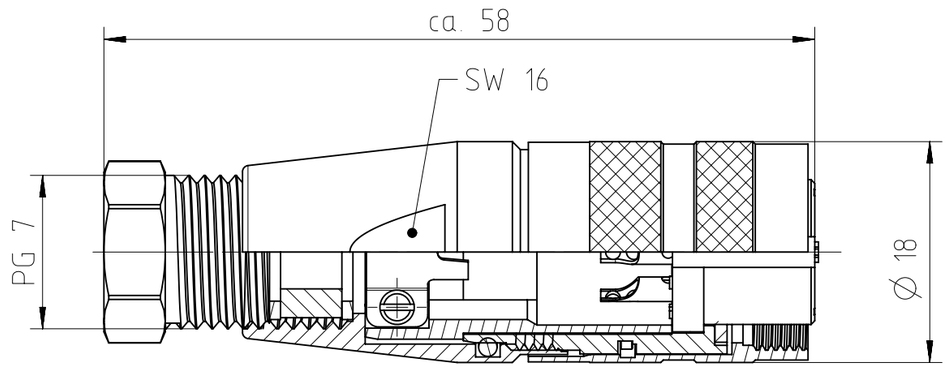
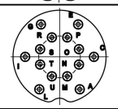
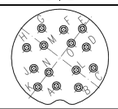
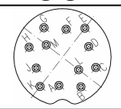
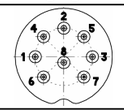
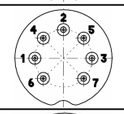
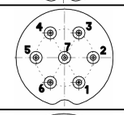
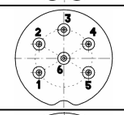
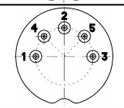
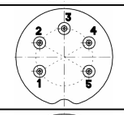
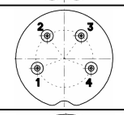
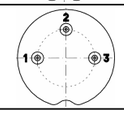


Number of contacts	Standard	3	4	5	5	6	7	7	8	12	14	14	19
Contact arrangement	IEC 61076-2-106	03-a	04-a	05-a	05-b	06-a	07-a	07-b	08-a	12-a	14-a	14-b	19-a
Contact arrangement	IEC 60130-9[1]	yes		no	yes		no	yes		no			
Rated voltage[2]	IEC 60664-1	300 V (100 V)		300 V (63 V)	100 V (32 V)	300 V (63 V)		100 V (32 V)		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		≤0,5mm² / 20 AWG								≤0,35mm² / 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											

[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 $>10^8$ Ohm

Do not connect or disconnect under load. Metal housing parts shall be securely incoporated 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 pratical usage of the product. Any product information is for descriptive usage only and not legally binding; particulary the information does not constitute or provide any legal guaranties ("Beschaffenheitsgarantie" or " Haltbarkeitsgarantie").

Contact arrangement View on mating side	Number of contacts (Contact arrangement acc. IEC 61076-2-106)	Part number-Ag	Part number-Au
	19 (19-a)	C091 31D019 100 2 U	C091 31D019 200 2 U
	14 (14-b)	C091 31D114 100 2 U	C091 31D114 200 2 U
	14 (14-a)	C091 31D014 100 2 U	C091 31D014 200 2 U
	12 (12-a)	C091 31D012 10 2 U	C091 31D012 200 2 U
	8 (08-a)	C091 31D008 100 2 U	C091 31D008 200 2 U
	7 (07-b)	C091 31D107 100 2 U	C091 31D107 200 2 U
	7 (07-a)	C091 31D007 100 2 U	C091 31D007 200 2 U
	6 (06-a)	C091 31D006 100 2 U	C091 31D006 200 2 U
	5 (05-b)	C091 31D105 100 2 U	C091 31D105 200 2 U
	5 (05-a)	C091 31D005 100 2 U	C091 31D005 200 2 U
	4 (04-a)	C091 31D004 100 2 U	C091 31D004 200 2 U
	3 (03-a)	C091 31D003 100 2 U	C091 31D003 200 2 U

Gewicht (errechnet) / *Calc WT*: 43,442 g
Prüfmaß / *Testdimension*
Teileindex / *Partindexnumber:*
Bagatelle change: 25.02.2021 MCARLE

Zul. Abw. / *Tolerances*: ISO 2768-c
DIN / ISO 13715

Maßstab / *Scale*: 2:1 | A3

CUSTOMER DRAWING

07	202000083	27.10.2020	MCARL
06	202000001	30.04.2020	MCARL
05	202000001	23.04.2020	MCARL
04	201700004	19.06.2017	NPFEI
Index	Änderung / *Description*	Datum / *Date*	Name

Gez. / Drawn: 08.06.2017 AZN_NPFEIFFE
Status: Released
Gepr. / Checked: 11.01.2021 MBERTSCH

Amphenol Tuchel Industrial GmbH

Female cable connector
female cable connector

M C091 31DXXX X00 2 U

Blatt / *Sheet* 1 / 1 Bl.

Ers. f. / *Replacement for*: M-C091 31DXXX X00 2 Rev03

FAI2020-004022
NXM1-V05

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