



Number of contacts	Standard	3	4	5	5S	6	7	7	8	12	14	
Contact arrangement	DIN EN 61076-2-106	03-a	04-a	05-a	05-b	06-a	07-a	07-b	08-a	12-a	14-a	
Contact arrangement	IEC 60130-9 ¹⁾			-								
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)					
Rated voltage	UL 1977	250 V						60 V				
Rated impulse withstand voltage ²⁾	IEC 60664-1	1500 V (840 V)		1200 V (500 V)	1500 V (840 V)		1200 V (500 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/+104°F				
please refer also to current derating curves, see C091 ABC Series												
Insulation resistance	IEC 60512-3-1	>10 ¹⁰ Ohm ⁴⁾										
Contact resistance	IEC 60512-2-1	<5m Ohm										
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 67 / IP 65 (in mated condition)										
Insertion and withdrawal force	IEC 60512-13-2	25N 90.oz	30N 100.oz	35N 125.oz	50N 180.oz	55N 200.oz	60N 220.oz	50N 180.oz				
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										
Contacts		silver or gold plated ⁵⁾										
Termination technique		solder										
Wire gauge		solder ≥0,5 mm ² / 20 AWG						solder ≥0,25 mm ² / 24 AWG				
Flamability		UL 94 VO										
locking system	IEC 60130-9 DIN EN 61076-2-106	metal screw coupling; tightening torque 1,0-1,5 Nm										
UL	UL 1977	conditions of acceptability										

	14 (14-a)	C091 31H014 101 2 U	C091 31H014 201 2 U
	12 (12-a)	C091 31H012 101 2 U	C091 31H012 201 2 U
	8 (08-a)	C091 31H008 101 2 U	C091 31H008 201 2 U
	7 (07-b)	C091 31H107 101 2 U	C091 31H107 201 2 U
	7 (07-a)	C091 31H007 101 2 U	C091 31H007 201 2 U
	6 (6-a)	C091 31H006 101 2 U	C091 31H006 201 2 U
	5 (05-b)	C091 31H105 101 2 U	C091 31H105 201 2 U
	5 (05-a)	C091 31H005 101 2 U	C091 31H005 201 2 U
	4 (04-a)	C091 31H004 101 2 U	C091 31H004 201 2 U
	3 (03-a)	C091 31H003 101 2 U	C091 31H003 201 2 U
Contact arrangement View on mating side	Number of contacts (Contact arrangement acc. DIN EN 61076-2-106)	Part number silver plated contacts	Part number gold plated contacts

Gewicht (errechnet) / Calc WT: 0,039 kg	Zul. Abw./Tolerances:	Maßstab / Scale: 2:1 ; 1:1	A3	
Prüfmaß / Testdimension	Teilindex / Partindexnumber	CUSTOMER DRAWING		
Datum / Date	Name	Male cable connector <i>Male Cabel Connector 8 pole</i>		
Gez. / Drawn	26.04.2016 MTOLK			
Status: Released		M C091 31HXXX X01 2 U		
Inspector: 27.04.2016 MGRIM				
Amphenol-Tuchel Electronics GmbH		Blatt / Sheet 1 1 Bl.		
02	201600004	26.04.2016	MTOLK	Ers. f. / Replacement for: M-C091 31HXXX X01 2 U Rev01
Index	Änderung / Description	Datum / Date	Name	4.031.219

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 60664-1 are fulfilled
⁴⁾ under operating conditions >10⁸ Ohm
⁵⁾ 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. Do not connect or disconnect under load. Metal housing parts shall be securely incorporated to protected ground. Parts according to directive 2002/95/EG (RoHS).

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