

Electrical Performance

ELECTRICAL PARAMETERS

Voltage Service Rating IAW MIL-DTL-5015 (Specifications Non-Circuit Breaking)			
Service Voltage Rating	Operating Voltage VDC [V]	Operating Voltage VAC RMS [V]	Test Voltage VAC RMS [V]
I	250	200	1000
A	700	500	2000
D	1250	900	2800
E	1750	1250	3500
B	2450	1750	4500
C	4200	3000	7000

Contact Max Current Rating IAW NEC and VG95234 (Specifications Non-Circuit Breaking)					
Contact Size AWG	Wire Size AWG	Wire Size mm ²	Max Rated Current [A]		Max Resistance [mΩ]
			According to N.E.C. (1) (2)	According to VG95234 (1) (3)	
16-16S	22	0.25	3	3	6.0
	20	0.5	7.5	7.5	
	18	0.75-1	9	9	
	16	1.5	16	20	
12	16	1.5	16	20	3.0
	14-12	2.5	30	32	
8	12	4	30	32	1.0
	10	6	40	42	
	8	10	50	60	
4	8	10	50	60	0.5
	6	16	70	85	
	4	25	90	120	
0	1	50	132	190	0.3
	0	-	155	220	

(1) Apply derating per contact arrangement IAW MIL-W-5088L.

(2) Non-circuit breaking contacts rated current as per N.E.C. (National Electrical Code) based on arcing control. Use a cable of minimum rated temperature of 90°C.

(3) Values extrapolated from rated current chart of VG95234-1, at ambient temperature of 40°C. Use a cable of minimum rated temperature of 100°C.

Shell Size	Voltage Service Rating	Insert Arrangements	Contact Size AWG	Max Theoretical Rating Current per Shell Size (A)
10SL	A	2	16	48
14S	I, A	7	16	90
16	I, A, D, E	6	16-12-8-4	90
18	I, A, D, B, C	18	16-12-8-4	210
28	I, A, D, E, B	29	16-12-8-4-0	570
36	I, A, D, C	24	16-12-8-4-0	1110

WARNING

- Use suitable cable with minimum rated continuous operating temperature of 90°C with N.E.C. maximum rated current.
- Use suitable cable with minimum rated continuous operating temperature of 100°C with VG95234 maximum rated current.

As to derating per insert arrangement, when multiple conductors are used, the load factor and temperature rise based on ambient and total insert temperature must be taken into account.

MIL-W-5088 specifications shall be used as reference for derating per insert arrangement.