

EPIC® Pin & Sleeve Connectors

Technical Data: Test Data & Cable OD Accommodation

TABLE 1
GROUND PATH CURRENT TEST

Device Rating Amperes	Minimum Size Grounding AWG	Conductor mm ²	Time in Seconds	Test Current Amperes
20	12	3.3	4	470
30	10	5.3	4	750
60	10	5.3	4	750
100	8	8.4	4	1180

A test current that far exceeds the device rating is passed through the mating device and grounding wires.

TABLE 2
ENDURANCE TEST

Device Rating Amperes	Cycles with load at rated current and voltage	No-Load Cycles	Sequence
20	5000	0	-
30	1000	1000	Alternating
60	1000	1000	Alternating
100	250	250	Alternating

The test sequence is conducted using a no-load, followed by a load sequence. The power factor of the load is 0.75 to 0.80.

TABLE 3
CABLE SECURENESS TEST

Device Rating Amperes	Force		Torque		Maximum Displacement	
	lb.	N	ft-lb	N•M	Inches	mm
20	30	133	0.4	0.54	3/32	2.38
30	75	333	0.5	0.68	3/32	2.38
60	150	667	1.0	1.4	3/32	2.38
100	150	667	2.0	2.7	3/32	2.38

The flexible cord or cable is simultaneously twisted and pulled. Values for the applied twisting torque and force of pull are shown in table 3. In all cases the cord displacement is less than 3/32.

TABLE 4
WITHDRAWAL FORCE TEST

Device Rating Amperes	Minimum Withdrawal Force	
	lb.	N
20	5	22
30	6	27
60	15	67
100	20	89

The pressure exerted by mating contacts of a plug and a connector must be sufficient to prevent unintentional withdrawal during normal use. During the test any locking rings or retaining means are not to be engaged.

TABLE 5
CABLE OD ACCOMMODATION

Product	Sleeve/Cable Gland (PG)	Cable Diameter min-max 2+PE (mm)	Cable Diameter min-max 3+PE (mm)	Cable Diameter min-max 3+N+PE (mm)
MULTIMAX: 20/16A	-	8.1 - 14	8.5 - 14	10 - 15.3
MULTIMAX: 30/32A	-	11.5 - 17.3	12.5 - 19.3	14 - 21.3
CEE: 2P+PE, 20/16A	13.5	8.1 - 13.5	-	-
CEE: 3P+PE, 20/16A	16	-	8.8 - 15.3	-
CEE: 3P+N+PE, 20/16A	16	-	-	8.8 - 15.3
CEE: 30/32A	21	11.5 - 21.3	11.5 - 21.3	11.5 - 21.3
CEE: 60/63A	29	16 - 28.5	16 - 28.5	16 - 28.5
CEE: 100/125A	2" Gas	26 - 49	26 - 49	26 - 49.0
ULYSSE: 20/16A	29	17.3 - 26	19.3 - 28.5	21.3 - 31.3
ULYSSE: 30/32A	29	17.3 - 26	19.3 - 28.5	21.3 - 31.3
ULYSSE: 60/63A	2 x 29	17.3 - 26	19.3 - 28.5	21.3 - 31.3
ALUPRES: 20/16A, 2P+PE & 3P+PE	1/2" Gas (NPT) 3/4" Gas (NPT)	11.5 - 17.3 -	12.5 - 19.3 -	- 14 - 21.3
ALUPRES: 20/16A, 3P+N+PE	1/2" Gas (NPT)	Min 12 - Max 16		
ALUPRES: 30/32A & 60/63A (choose and order separately)	3/4" Gas (NPT)	Min 16 - Max 20		
	1" Gas (NPT)	Min 22 - Max 25.5		
	1 1/4" Gas (NPT)	Min 26 - Max 36		