

The Cannon DL Series of Zero Insertion Force (ZIF) connectors fill the need in the medical, commercial / industrial, computer, and peripheral equipment market places for low-cost, high performance, multiple-wire power and signal connectors.

DL connectors feature: a minimum rated life of 10,000 complete mating and unmating cycles with no performance loss; can be mated and unmated in less than two seconds even with as many as 624 contacts; and they cost less (often as much as 25% less) per mated line than singular high-density rack-and-panel connectors.

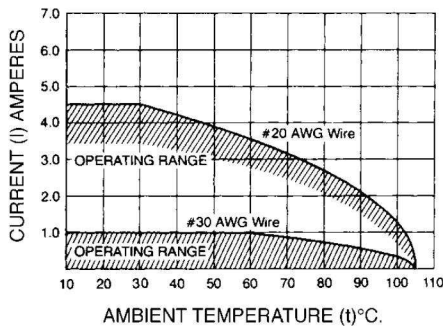
Simple. Effective. Reliable. Durable

Combining their special design with commercial-grade materials and low cost crimp, PCB, and wrappable hermaphroditic contacts, that may be hand or machine terminated, makes the DL Series of ZIF connectors the finest low-cost-per-mated-line I/O connectors available today.

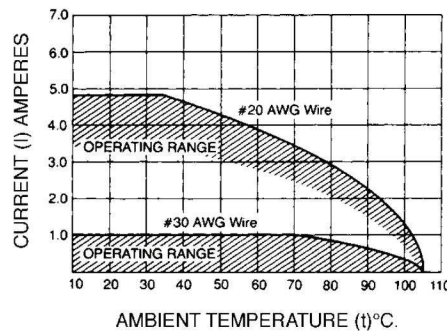


Derating Curves

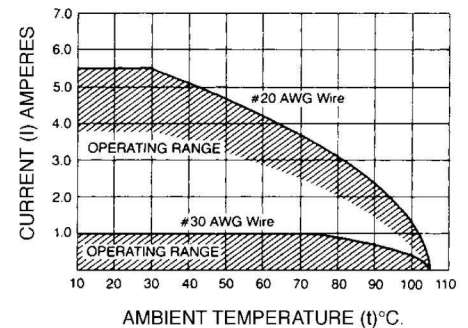
DL1



DL2



DL3



The ambient temperature curves shown represent the rated current carrying capacity of the Cannon DL1/2/3/4, electrical connectors, derated to 80% of the values recorded during the methods specified by International Electro-Technical Commission Document 48 (1975).

Current was applied to the total connector (all contacts) in one-half ampere increments and maintained at each current level until thermal stability was achieved. A thermocouple inserted into the "hottest area" of each connector then measured the connector temperature at the same time that an ambient temperature reading was taken. The difference between the two measured values is the heat rise or self-heating created solely by the current flow, and this temperature rise for the current level was deducted from the insulator material rated temperature. These values were then derated to 80% to obtain the curves shown.

Standard Materials and Finishes

DL Housing:	Glass Filled Thermoplastic, UL 94V-1 rated, Color: Black
Crimp Contacts and Square Post Contacts:	- Copper alloy, 20 or 50 microinches gold over 50 microinches nickel in mated area, gold flash on balance
Actuating Camshaft:	Stainless steel, Passivated
Insulator Retainer (Plug Only)	Stainless steel, Passivated

Electrical Data

No. of Contacts:	60, 96, 156, and 260 signal
Wire Size:	#18 AWG through #42 AWG
Contact Termination:	- Crimp - Square Post - Wrap Post - Buss - Pressfit

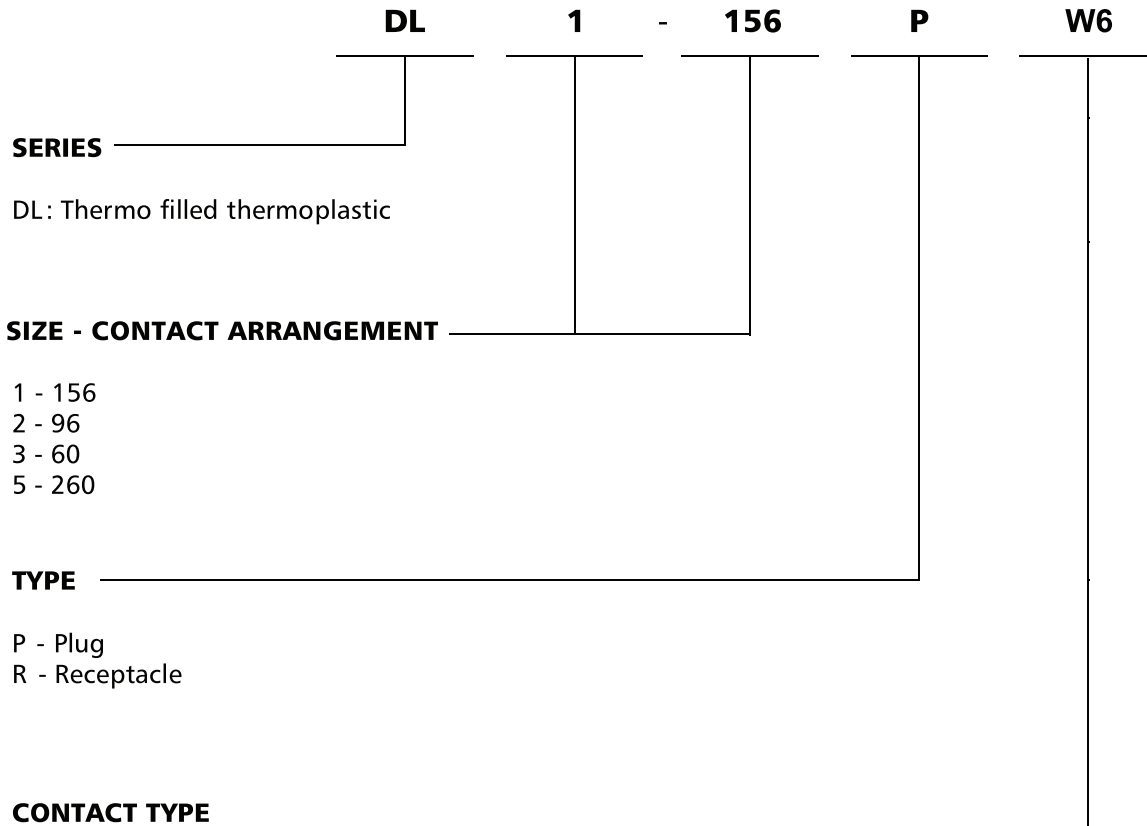
Mechanical Data

Actuation:	Single Hand
Coupling:	Rotating latch
Polarization:	Polarizing Posts
Contact Spacing:	2,54 (0.100) Square Grid
Shell Styles:	Plug and Receptacle

Performance Data

Current Rating:	5 A max - Crimp/Square Post/PCB contact 10 A, 20 A, 30 A, 40 A, 50 A, 60 A max - Buss contact
Dielectric Withstanding Voltage:	1200 VAC RMS - Crimp/Square Post Contact
Operating Temperature:	-55°C to 105°C (DL/DLM/DLD)
Insulation Resistance:	5000 Megaohms minimum
Durability:	10,000 Cycles minimum
Contact Resistance:	15 mΩ max. - Crimp/Square Post Contact 20 mΩ max. - Crimp #32 AWG - #30 AWG Contact
Insulation Resistance:	5000 MΩ min.
Wire Accommodation:	#42 AWG - #18 AWG
Contact Retention:	8 lb (35.585 N) minimum

How to Order



DL: Thermo filled thermoplastic

- 1 - 156
- 2 - 96
- 3 - 60
- 5 - 260

- P - Plug
- R - Receptacle

CONTACT TYPE

No letter - Crimp #18 thru #42 AWG
 TO BE ORDERED SEPARATELY AND INSTALLED BY CUSTOMER

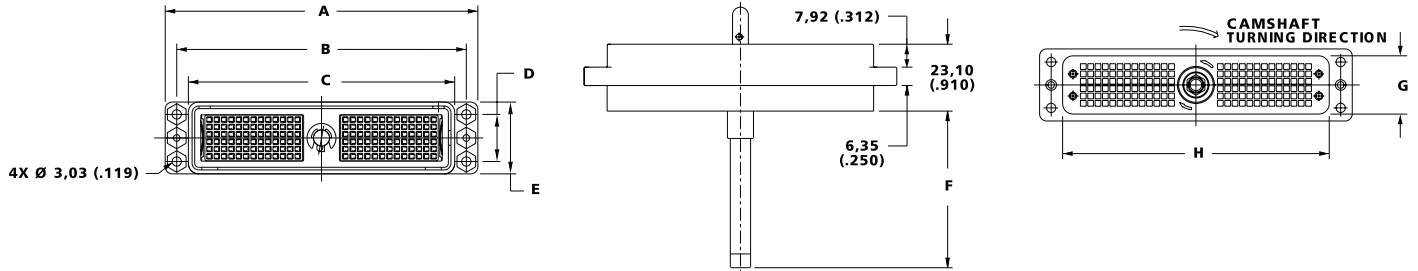
- W4 - Wrap Post 15,37 (0.605), 20 μ inches Gold
- W4A - Wrap Post 15,37 (0.605), 50 μ inches Gold, Plug only
- W4B - Wrap Post 15,37 (0.605), 50 μ inches Gold, Receptacle only
- W6 - Square Post 7,11 (0.280), 20 μ inches Gold
- W6A - Square Post 7,11 (0.280), 50 μ inches Gold, Plug only
- W6B - Square Post 7,11 (0.280), 50 μ inches Gold, Receptacle only
- W9A - Square Post 3,18 (0.125), 50 μ inches Gold, Plug only
- W9B - Square Post 3,18 (0.125), 50 μ inches Gold, Receptacle only
- F - Pressfit, 20 μ inches Gold, DL5 Receptacle only



Plug



- Order Actuating Handle Kit sold separately, see page 44.
- Crimp Contacts are to be ordered separately and to be installed by customer, see pages 48-50.
- For contact cavity arrangements see pages 69-70.
- For panel cutout and mounting hole pattern, see page 66.
- For PC hole pattern, see pages 59-61.

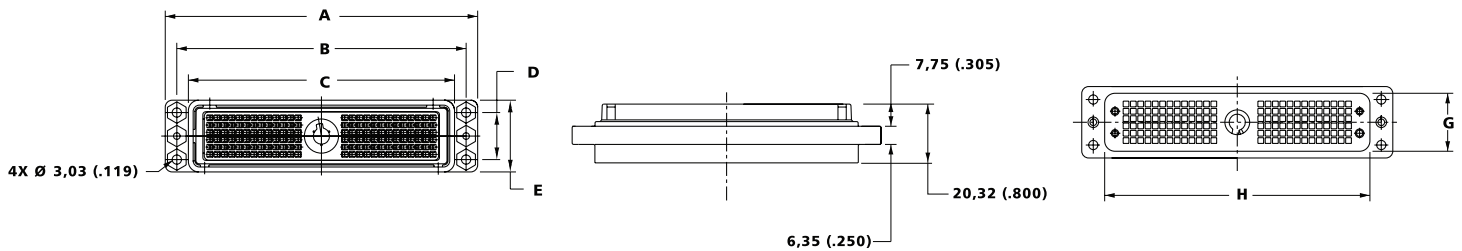


Description	A	B	C	D	E	F	G	H
DL3-60P	65,80 (2.592)	57,91 (2.280)	50,55 (1.992)	11,89 (0.466)	24,90 (0.981)	39,19 (1.543)	24,90 (0.981)	49,02 (1.931)
DL2-96P	65,80 (2.592)	57,91 (2.280)	50,60 (1.994)	19,38 (.763)	28,12 (1.108)	39,19 (1.543)	24,05 (0.947)	50,60 (1.994)
DL1-156P	108,00 (4.255)	100,03 (3.938)	92,26 (3.631)	16,26 (0.640)	24,90 (0.980)	54,81 (2.158)	20,10 (0.792)	92,10 (3.626)
DL5-260P	108,00 (4.255)	100,03 (3.938)	92,26 (3.631)	26,00 (1.024)	35,00 (1.378)	54,26 (2.136)	30,30 (1.193)	92,10 (3.626)

Receptacle



- Crimp Contacts are to be ordered separately and to be installed by customer, see pages 48-50.
- For contact cavity arrangements see pages 69-70.
- For panel cutout and mounting hole pattern, see page 66.
- For PC hole pattern, see pages 59-61.



Description	A	B	C	D	E	G	H
DL3-60R	65,80 (2.592)	57,91 (2.280)	50,50 (1.988)	11,89 (0.468)	24,90 (0.981)	19,18 (0.755)	49,02 (1.931)
DL2-96R	65,80 (2.592)	57,91 (2.280)	50,60 (1.994)	19,38 (.763)	28,12 (1.108)	24,05 (0.947)	50,60 (1.994)
DL1-156R	108,00 (4.255)	100,03 (3.938)	92,10 (3.622)	16,26 (0.640)	24,90 (0.980)	20,10 (0.792)	92,10 (3.626)
DL5-260R	108,00 (4.255)	100,03 (3.938)	92,10 (3.622)	26,00 (1.024)	35,00 (1.378)	30,30 (1.193)	92,10 (3.626)

Notes:
Crimp contacts are to be ordered separately and to be installed by customer, see pages 49-50.

Dimensions shown in mm (inch)
Specifications and dimensions subject to change