# **DF51B Series**



## **Applications:**













Industrial Robots

Office Automation

**Smart Meter** 

SignalBee \$

# **Introducing the DF51B Series – Branch Connector**

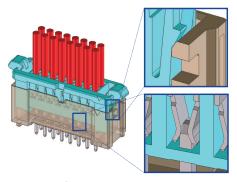
Discover the DF51B Connector by Hirose: a 2mm pitch, positive lock connector tailored for versatility. It offers a range of configurations including straight, right-angle, and branching. With its user-friendly side lock design, you're guaranteed an effortless and reliable connection. Designed to withstand strain, it's adaptable for varied cable types and proudly UL/C-UL certified.

### 2mm Pitch, Positive Lock, Crimp Type Connector

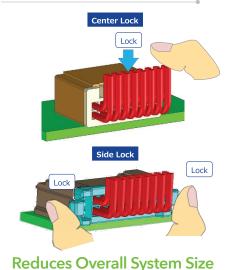
- Wide varieties satisfy various customer requirements, Straight/Right angle/In-line Connection/Branch, Single/Dual row, Gold/Tin Plating, etc.
- Side lock design enables user-friendly operation and reliable connection
- High contact lance strength prevents contact pulling loose while wrenching the cables
- Applicable Cable: 22-30 AWG
- UL/C-UL certified

## **Secure Mating**

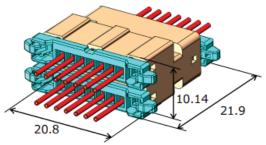
Clear Tactile Click Prevents Incomplete Insertion



# Lock Design



# **Branch Connector**



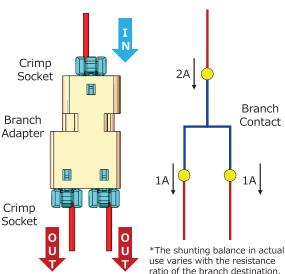
# **Branch Design**

The use of the adapter allows the current to branch

Simplified Wiring Contributes to Small Size and Light Weight Applications



CLICK HERE TO ORDER SAMPLE NUMBER: US-DF51BSAMPLE-23



## **Dimensions**

### Straight

### Right Angle

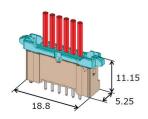
### **In-line Connection**

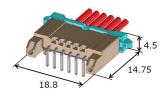
#### Branch

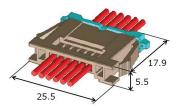
Single-row, Ex: 7pos.

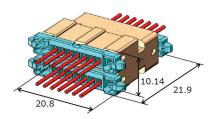
(mm)

Single-row, Ex: 6pos.

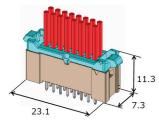


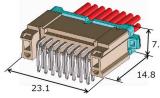


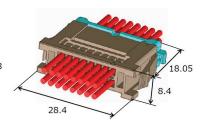




### Dual-row, Ex: 16pos.







## **Specifications**

MATERIAL & FINISH								
Housing	Header	PBT	UL94V-0, Black					
	Socket	PBT	UL94V-0, Black					
	Adapter	PBT	UL94V-0, Black					
Header Contact		Brass	Tin Plated or Gold Plated (Nickel Underplating)					
Adapter Contact		Brass	Gold Plated (Nickel Underplating)					
Crimp Contact		Phosphor Bronze	Tin Plated or Gold Plated (Nickel Underplating)					

CHARACTERISTICS									
		Pos.	22 AWG	24 AWG	26 AWG	28 AWG	30 AWG		
	Single- Row	2	3A	2.5A	2A 1.5A	1A	0.5A		
Rated Current		3-7	2A	2A					
	Dual- Row	4	3A	2.5A					
		6-30	2A	2A					
Rated Voltage	250V AC/DC								
Operating Temperature	-55 to +105℃*								
Contact Resistance	30mΩ Max. (20mV, 1mA)								
Withstanding Voltage	650V AC for 1 min.								
Insulation Resistance	1000MΩ Min. (500V DC)								
Mating Durability	30 times (Sn), 50 times (Au)								

<sup>-</sup> Variations: Single row\_2-6pos., Dual row\_4-30pos., Single row (branch)\_2-4,6,7pos.

<sup>-</sup> RoHS compliant



For additional information please go to www.hirose.com/product/series/DF51

Specifications herein are subject to change without notice. Contact Hirose for latest specifications, drawings, or availabilities.





st Including the temperature rising by current flow.

<sup>-</sup> Applicable cable: 22 to 30 AWG