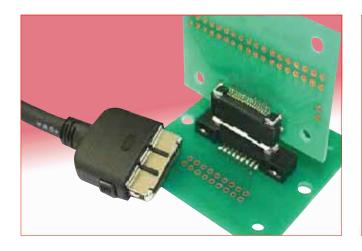
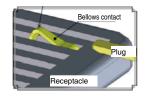
# **High Life Cycle Interface Connectors**

3800 Series



#### Hirose's Unique Contact Structure with High Durability

- 1) Minimum contact shaving due to a rolled surface on the bellows contact side
- The spring contact design prevents buckling.
   Stable contact design provides the support needed to endure 20,000 mating cycles. Provides ideal long term contact force.



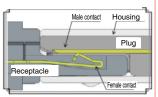


Fig.(1)

#### ■Features

- 1. 20,000 mating/unmating life cycle with unique Hirose contact structure.
- 2. The structure utilizes a metal shell that is 0.35 mm thick. The shell is designed to cover the housing and protect against rough mechanical operation.

The addition of reinforced metal fittings increases the PCB retention force and allows these connectors to be mounted with commercially available screws for the cradle type. (Fig.2)

- 3. Sequential mating, that features a 0.5 mm range (Fig.3)
- 4. Its small size and light weight design are helpful for use in compact devices
- 5. Simple mating process with a tactile click that assures proper mating completion.

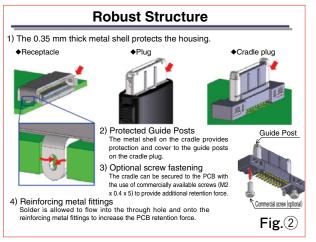
The pushbutton locking system leads to a simplified mating process that delivers a tactile click to ensure that the mating process was correctly completed.

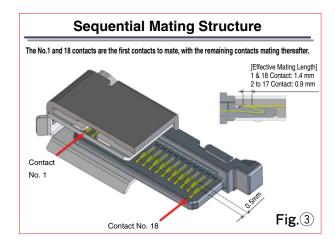
#### 6. One piece plug cover

The assembly of this connector is simplified due to its one-piece plug cover.

#### 7. RoHS compliant

All materials and substances used to produce this product comply with the RoHS free standards.





## **■**Product Specifications

Ratings	Rated Current	No.2 $\sim$ N0.17 $\Rightarrow$ 0.5A No.1, No.18 $\Rightarrow$ 1.5A	Оре	Rated Voltage erating Temperature Range	AC 125V -40 ∼ +85°C
Items	Specifications			Condition	S
1. Insulation					

Items	Specifications	Conditions	
Insulation     Resistance	Minimum of 1,000M $\Omega$	Measured with DC 250V.	
Withstanding     Voltage	No flashover or breakdown	Apply 350V AC for 1 minute	
3. Contact Resistance	Maximum of 70mΩ	Measured with 100mA (DC or 1,000 Hz) or below	
4. Durability	<ol> <li>Maximum of 20mΩ of deflection from its initial state</li> <li>No damaged, cracked or loose parts</li> </ol>	20,000 mating cycles	

### **■**Materials / Finish

### ● Receptacle

Component	Materials	Color/Finish	Remarks
Housing	Polyamide resin	Black	UL94V-0
Contact	Copper alloy	Selective gold plating	_
Dust cover	Polyamide resin	Black	UL94V-0
Metal shell	Stainless Steel	Tin plating	_

#### **●Cradle Type Plug**

Component	Materials	Color/Finish	Remarks
Housing	Polyamide resin	Black	UL94V-0
Contact	Copper alloy	Selective gold plating	-
Metal shell	Stainless steel	Tin plating	-
Fastening screw metal	Steel	Nickel under plating	-

### ●Plug

Component	Materials	Color/Finish	Remarks
Housing	Polyamide resin	Black	UL94V-0
Contact	Copper alloy	Selective gold plating	-
Cover	Polycarbonate	Black	UL94V-0
Metal shell	Stainless steel	-	-

#### ■Product Number Structure

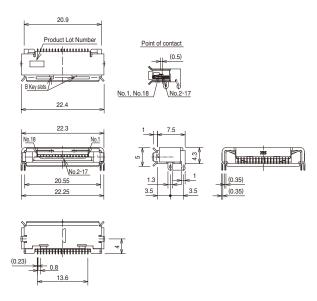
Refer to the chart below when determining the product specifications from the product number. Please select from the product numbers listed in this catalog when placing orders.

Series Number : 38	Mating Key Type	
2 Termination style	4 No. of Contacts	
40 : Soldering Type	5 Type of Connector	
60 : Right Angle SMT Type	P : Plug	
80 : Cradle Type SMT Type	S : Receptacle	

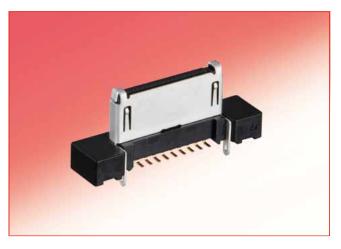
## **■**Receptacle Connector



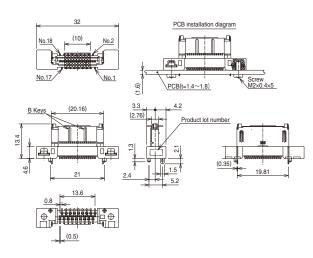
Part No.	HRS No.	Quantity
3860-B-18S	238-2006-7 00	600 pcs/reel



## **■**Cradle Plug Connector



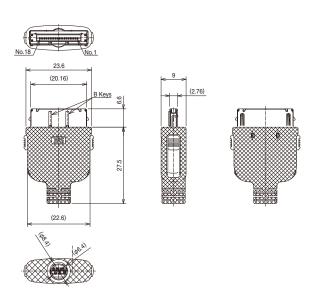
Part No.	HRS No.	
3880-B-18P	238-2008-2 00	



## **■Plug Connector**



Part No.	HRS No.
3840-B-18P	238-2007-0 00

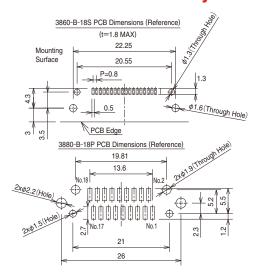


### Applicable Cable

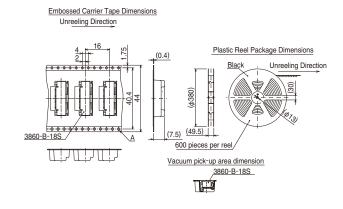
	Cross Section	0.08mm <sup>2</sup>
Conductor Size	Configuration	7 / 0.127mm
	Outer Diameter	<b>∮</b> 0.38mm
Outer Diameter of Insulation	<b>∮</b> 0.58mm	
Wire Size	28 AWG	

UL STYLE OF APPLICABLE CABLE: 20620, 20276

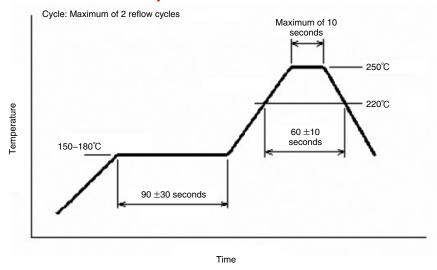
## 



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## 



Please check the mounting conditions before use, conditions such as solder paste types, manufacturer, PCB size and any other soldering materials may alter the performance of such materials.



# HIROSE ELECTRIC CO.,LTD.

2-6-3,Nakagawa Chuoh,Tsuzuki-Ku,Yokohama-Shi 224-8540,JAPAN TEL: +81-45-620-3526 Fax: +81-45-591-3726 http://www.hirose.com http://www.hirose-connectors.com