

# HR10 SERIES SHELL SIZE 7mm PUSH-PULL CONNECTORS

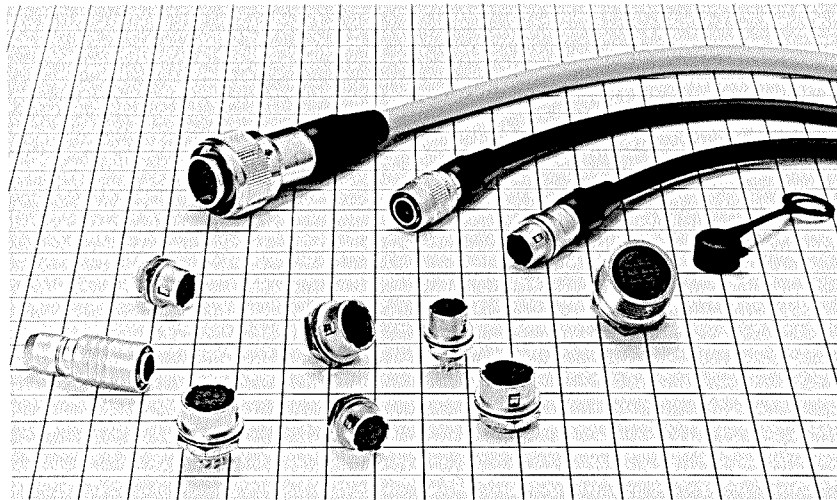
## Introduction

The HR10 series connectors are push-pull coupling type micro-connectors. They have been developed in response to customers' needs for miniaturization, high density, and easy handling.

The HR10 series connectors offer light weight and assure high reliability and durability as well as easy "push-pull" operation.

You may apply the HR10 series connectors to all kinds of

small-sized electronic equipment requiring high reliability. However, these simple but refined connectors are most suitable for portable electronic equipment which requires good appearance. Typical applications are: Computers and peripherals, medical equipment, audio equipment, video equipment, portable radio (wireless) apparatus, measuring equipment, etc.



## Features

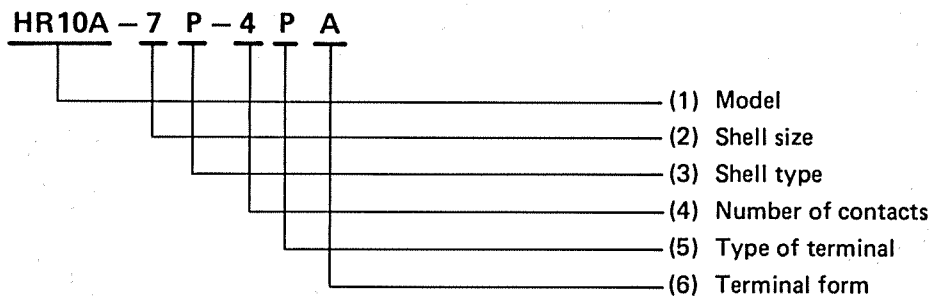
- 1. "A LITTLE GIANT"**  
The most compact HR10 series is as slender as a cigarette but it fits every application with well-balanced, simplified layout in limited space.
- 2. EASY "PUSH-PULL" OPERATION**  
One touch "push-pull" coupling mechanism assures easy and quick connecting and disconnecting. You can couple it accurately just by pushing any part of the connector housing.
- 3. POLARIZATION**  
Five-key system permits only one way of coupling so that you can find right position to connect even when blind mating.
- 4. PROTECTION OF CONNECTION PIN**  
A connector pin is located to avoid any damage which may be caused when blind mating.
- 5. HIGH DENSITY**  
The space-saving "push-pull" mechanism facilitates multi-installation of connectors.
- 6. EASY WIRING AND MOUNTING**  
No use of screws makes wiring and mounting easier.
- 7. SIMPLE AND REFINED APPEARANCE**  
Simple and well designed connectors with matte finish enhance the appearance of the equipment.

## Material & Finish

### Main materials

Part	Material	Finish
Shell	Zinc-alloy and brass	Satin-finished nickel plate
Insulation	Polyamide resin or PBT resin	(Blue or black)
Male terminal	Brass or bronze	Silver- or gold-plated
Female terminal	Beryllium or phosphor bronze	Silver- or gold-plated

### Ordering Information



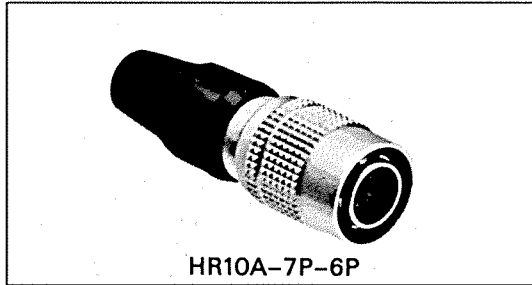
- (1) Model: Denotes HR10 series as follows:  
 HR10A: Low-cost model  
 HR10G: Shielded  
 HR10E: Built-in capacitor  
 HR10B: Coaxial terminal  
 HR10D: Connector sleeve rotation inhibited
- (2) Shell size: Plug mating part outside diameter in mm.
- (3) Shell type: Indicates the type of shell as follows:  
 P: Plug      R: Receptacle      J: Jack
- (4) Number of contacts: Indicates the number of contacts.
- (5) Type of terminal: Indicates the type of terminal as follows:  
 P: Male terminal      S: Female terminal
- (6) Terminal form: Indicates terminal connection system in terminal form in alphabetic characters.  
 C: Crimp connection system

## HR10A·10G Type

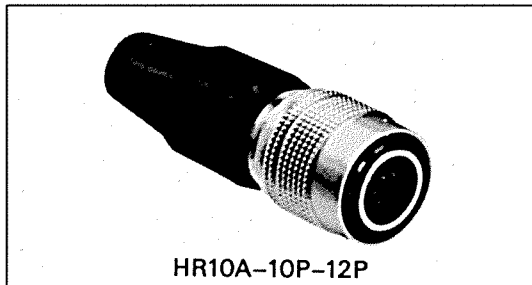
The model HR10A is a lowcost connector maintaining the excellent characteristics of the HR10 connector while meeting VA requirements. To ensure increased cable-clamping force, the cables are crimped with a special crimping tool, and to increase cable resistance to bending, the shell is covered with a rubber bushing.

The model HR10G is a shielding connector having a built-in contact mechanism with the plug shell inside the receptacle. The standard HR10A and HR10G connector contacts are silver-plated.

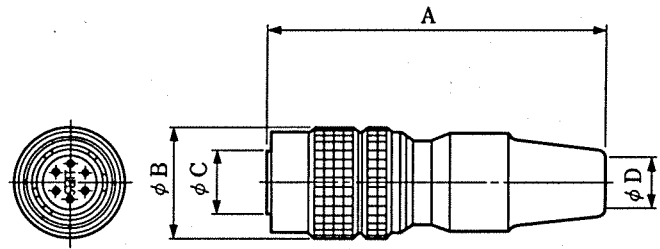
### Plug (Solder Type)



HR10A-7P-6P



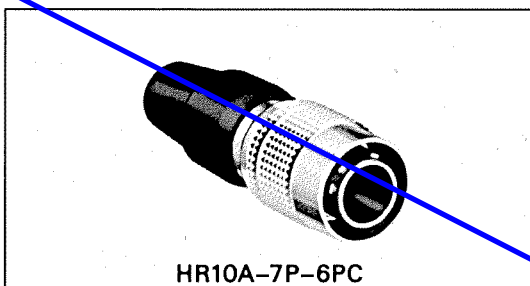
HR10A-10P-12P



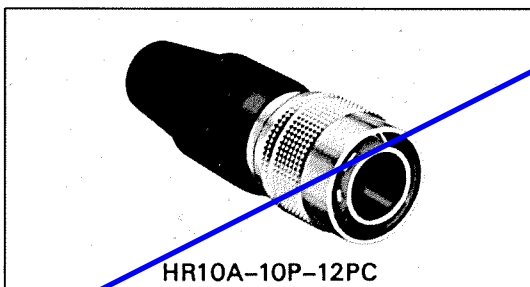
(An example in shape)

HRS No.	Part No.	No. of pins	A	$\phi B$	$\phi C$	$\phi D$	Weight
110-0301-2	HR10A-7P-4P	4	35	11.5	7	5	9g
110-0302-5	HR10A-7P-4S	4	35	11.5	7	5	9g
110-0318-5	HR10A-7P-5P	5	35	11.5	7	5	9g
110-0319-8	HR10A-7P-5S	5	35	11.5	7	5	9g
110-0303-8	HR10A-7P-6P	6	35	11.5	7	5	9g
110-0304-0	HR10A-7P-6S	6	35	11.5	7	5	9g
110-0407-3	HR10A-10P-10P	10	43	14.7	9.5	7	16g
110-0408-6	HR10A-10P-10S	10	43	14.7	9.5	7	16g
110-0401-7	HR10A-10P-12P	12	43	14.7	9.5	7	16g
110-0402-0	HR10A-10P-12S	12	43	14.7	9.5	7	16g
110-0713-0	HR10A-13P-20P	20	58.8	19	13	7	37g
110-0716-8	HR10A-13P-20S	20	58.8	19	13	7	37g

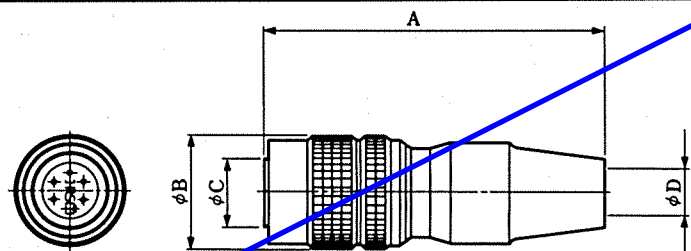
### Plug (Crimp Type)



HR10A-7P-6PC



HR10A-10P-12PC



(An example in shape)

HRS No.	Part No.	No. of pins	A	$\phi B$	$\phi C$	$\phi D$	Weight
110-0501-1	HR10A-7P-4PC	4	35	11.5	7	5	9g
110-0502-4	HR10A-7P-4SC	4	35	11.5	7	5	9g
110-0503-7	HR10A-7P-6PC	6	35	11.5	7	5	9g
110-0504-0	HR10A-7P-6SC	6	35	11.5	7	5	9g
110-0601-6	HR10A-10P-10PC	10	43	14.7	9.5	7	16g
110-0602-9	HR10A-10P-10SC	10	43	14.7	9.5	7	16g
110-0603-1	HR10A-10P-12PC	12	43	14.7	9.5	7	16g
110-0604-4	HR10A-10P-12SC	12	43	14.7	9.5	7	16g
110-0701-0	HR10A-13P-20PC	20	58.8	19	13	7	37g
110-0702-3	HR10A-13P-20SC	20	58.8	19	13	7	37g