

Waterproof Cable to Cable Connector HB01 Series

CONNECTOR
MB-0384-1
Oct.2022

RoHS Compliant



Overview

In recent years, the use of outdoor equipment has been expanded and performance has been improved, and unitization has been promoted from the optimization of manufacturing and operation efficiency of equipment. As an example, it is necessary to cope with forced air cooling from natural air cooling by performance enhancement. The HB01 Series waterproof connectors are utilized in making connection within outdoor equipment.

Application

Base stations, signage, EV charging station, and other outdoor equipment.

Features

- Individual cable waterproof construction, eliminating the need for potting.
- Floating mechanism to absorb misalignment during mating.
- Significantly more compact compared to commonly utilized connectors.
- IP67 waterproof rating in mated condition.

General Specifications

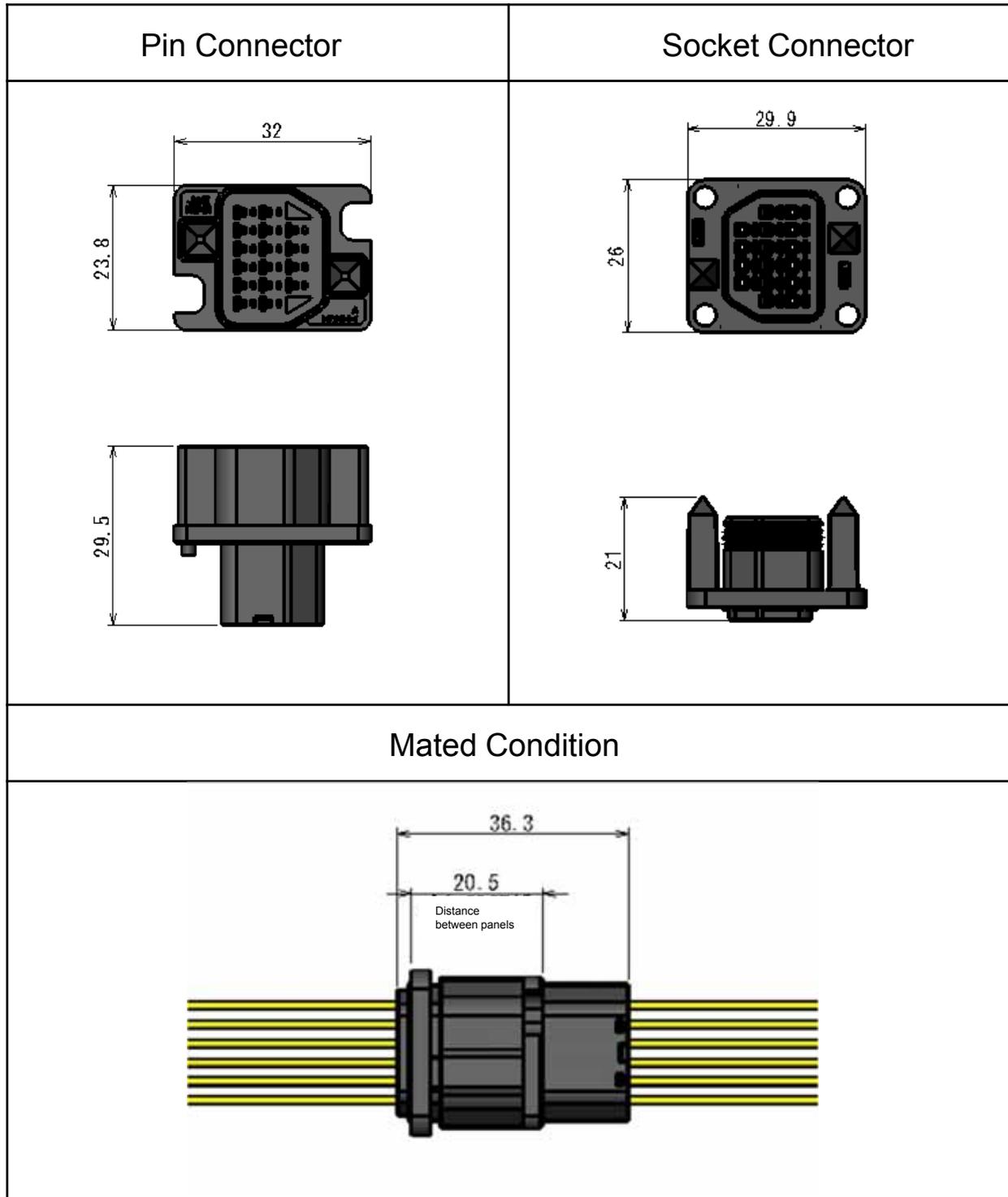
Number of Contacts	16 positions , 12 positions		
Rated Current	1 A (Per position)		
Rated Voltage	A.C., D.C. 50V		
Applicable Wire	Contact Size	Cable Size	Outer Diameter
	#22	AWG#22 ~ 24	ø0.9 ~ 1.5mm
	#26	AWG#26 ~ 28	ø0.9 ~ 1.5mm
Contact Resistance	10mΩ max. (Initial) 20mΩ max (Post-test)		
Insulation Resistance	1000MΩ min. (Initial) 1000MΩ min. (Post-test)		
Dielectric Withstanding Voltage	1000Vr.m.s		
Cable Retention Force	20N min.		
Durability	50 times		
Operating Temperature	-40°C ~ +85°C		

Materials and Finishes

Component	Materials and Finishes
Insulator Mold	PA66
Contact	Copper Alloy / Contact: Gold plating over nickel Termination point: Tin plating over nickel Other: Nickel plating
Grommet	Silicone Rubber
Cover Mold	PA66
Seal ring	Silicone Rubber
Shoulder bolt	Stainless steel

Outer Dimensions

Unit: mm



Part Numbers and Product Drawings

Connector Part Numbers

Part Number	Drawing Number	Product type	Note
HB01P016PZ1	SJ118805	Pin connector	For 16-pin
HB01S016SZ1	SJ118806	Socket Connector	16-pin and 12-pin common
HB01P016PZ2	SJ118820	Pin connector	For 12-pin
D250-50717	SJ118821	Shoulder bolt	M3×0.5 Hexalobular socket No.10

Contact Part Numbers

Part Number	Drawing Number	Contact Type		Packaging	Applicable Wire Size
HB01P06K4P3	SJ118795	#22	Pin	6,000pc / reel	AWG #22 ~ #24
HB01S06K4P3	SJ118796	#22	Socket	6,000pc / reel	
HB01P06K5P2	SJ120901	#26	Pin	6,000pc / reel	AWG #26 ~ #28
HB01S06K5P2	SJ120902	#26	Socket	6,000pc / reel	

Technical Documents

Specifications:
Handling Manual:

JACS-11204
JAHL-11204

Tooling

Applicable Contacts	Tool Part Number (User's Manual)		
	Hand Tool	Semi-automatic Applicator	Extraction Tool
HB01P06K4P3	TBD	3502-HB01S-2B (T703566)	ET-HB01
HB01S06K4P3			
HB01P06K5P2			
HB01S06K5P2			

NOTES.

Crimp tool tooth profile may need to be adjusted to match contact and wire size.

Adjustment is required when using applicators.

Refer to the tool instruction manual for details.

Notice:

1. The values specified in this brochure are only for reference. The products and their specifications are subject to change without notice. Contact our sales staff for further information before considering or ordering any of our products. For purchase, a product specification must be agreed upon.

2. Users are requested to provide protection circuits and redundancy circuits to ensure safety of the equipment, and sufficiently review the suitability of JAE's products to the equipment.

3. The products presented in this brochure are designed for the uses recommended below. We strongly suggest you contact our sales staff when considering use of any of the products in any other way than the recommended applications or for a specific use that requires an extremely high reliability.

(1) Applications that require consultation:

(i) Please contact us if you are considering use involving a quality assurance program that you specify or that is peculiar to the industry, such as:

Automotive electrical components, train control, telecommunications devices (mainline), traffic light control, electric power, combustion control, fire prevention or security systems, disaster prevention equipment, etc.

(ii) We may separately give you our support with a quality assurance program that

you specify, when you think of a use such as :

Aviation or space equipment, submarine repeaters, nuclear power control systems, medical equipment for life support, etc.

(2) Recommended applications include:

Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc.

Japan Aviation Electronics Industry, Limited

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