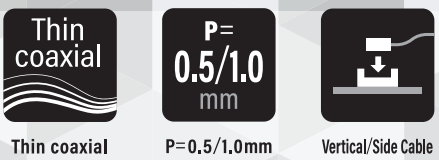
PRODUCT CATALOG

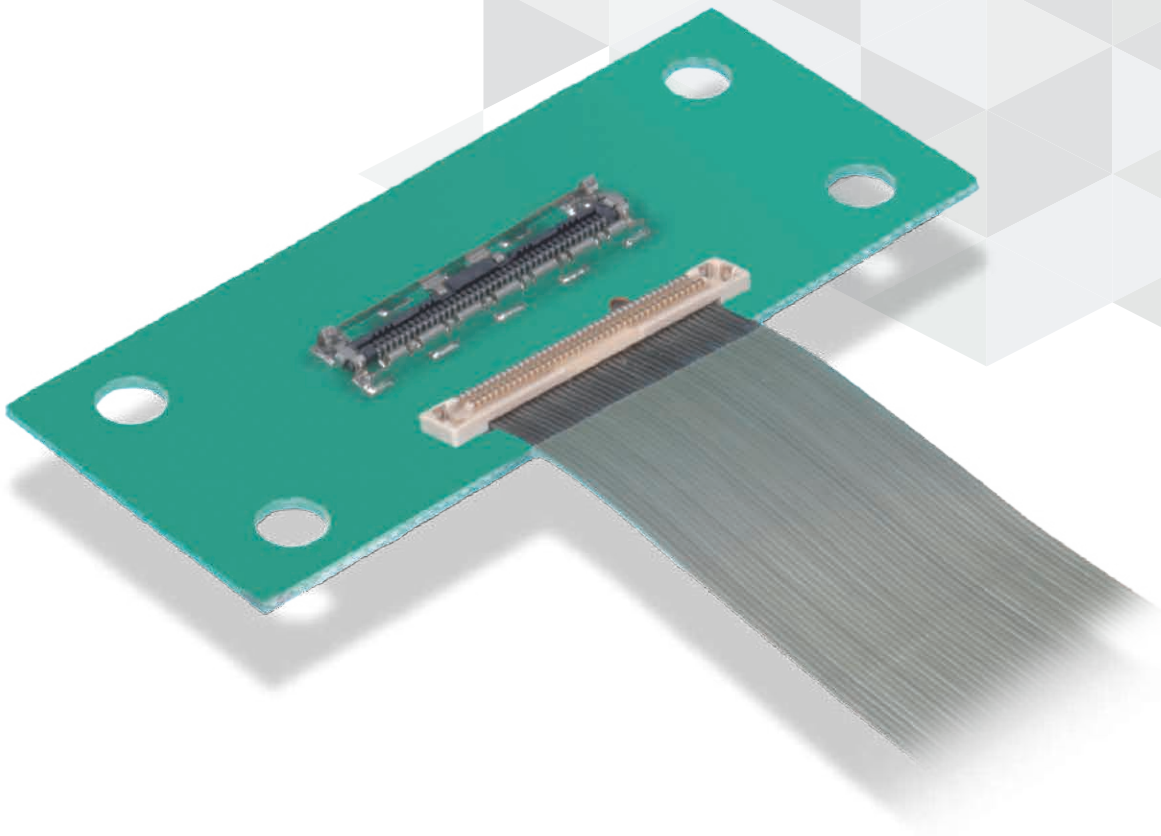
HIROSE ELECTRIC CO.,LTD.

DF36 Series

0.4mm Pitch, Vertical Mating, Micro-Coaxial Cable Connector



Thin coaxial | P=0.5/1.0mm | Vertical/Side Cable



Aug.1.2026 Copyright 2026 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

Product Page
https://www.hirose.com/en/product/series/DF36

Jul. 2023

Features

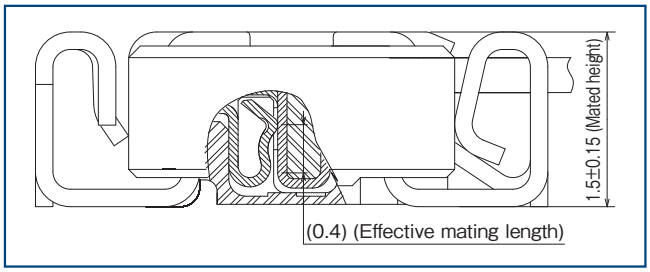
1. Support High Density Mounting and Small-Diameter Hinge

With a narrow pitch of 0.4 mm and a vertical mating, it is possible to make it space-saving and pass it easily through a small-diameter hinge.

Standard Type :
1.5mm Mated Height, Depth 4.4mm

Space-Saving Type :
1.5mm Mated Height, Depth 2.8mm

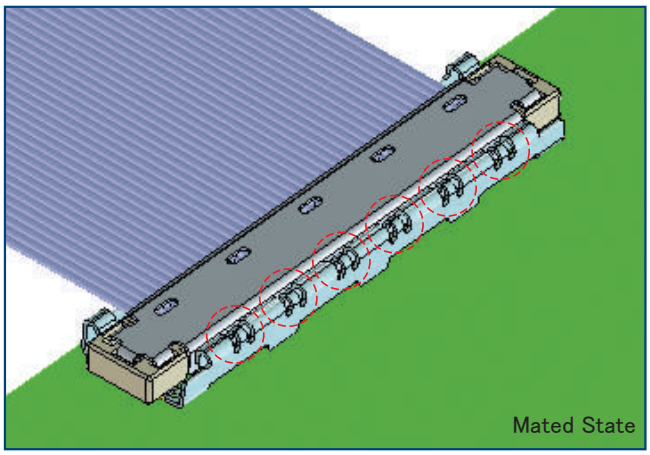
Plug :
1.33mm Height, Depth 2.8mm



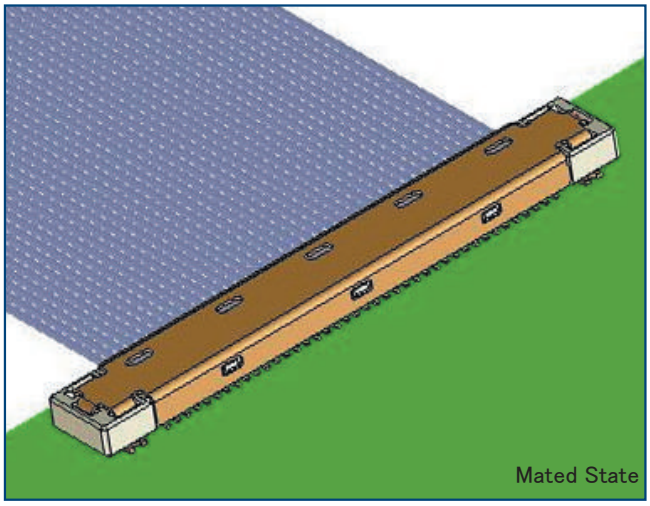
Highly Reliable Contact Design
(Effective Mating Length 0.4mm)

2. Enhanced Shield Performance

Enclose the connector with a metal exterior shell and connect the plug shell to the receptacle shell. Multi-point contact grounding spring is used for stable contact reliability.
(Ground springs are used only in the standard type.)



Standard Type

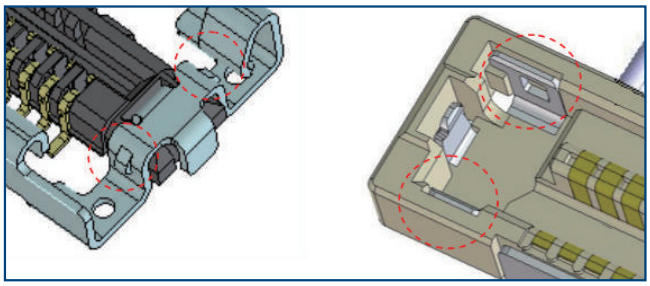


Space-Saving Type

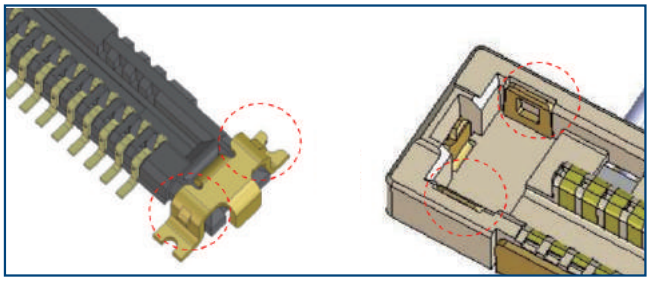
Aug.1.2026 Copyright 2026 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

3. Clickable and Secure Locking Design

The four-point locking design provides a clear click and excellent drop resistance.



4-Point Lock: 2 points at each end (standard type)



4-Point Lock: 2 points at each end (space-saving type)

4. Reliable Contact Design

Low profile with mated height of 1.5mm and effective mating length of 0.4mm.
The pinching contact design provides high contact reliability.

5. Solder Wicking Prevention

Mounting lead is 0.4 mm pitch for easy mounting, and despite its low profile, the nickel barrier prevents solder wicking.

6. Robust Plug Design

The plug is consisted to fold the metal shell and cover it from two directions, the top and front. While small size, it has a robust design.

7. RoHS2, Halogen-free Compliant

No chlorine or bromine exceeding the standard values are used in this connector.

*As defined by IEC61249-2-21
Br-900 ppm maximum, Cl-900 ppm maximum,
Cl+Br combined-1,500 ppm maximum

Aug.1.2026 Copyright 2026 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

Product Specifications

Rated Current (Note 1)	42 AWG : 0.25A 44 AWG : 0.25A 46 AWG : 0.1A	Operating Temperature (Note 2)	-35 to +85℃
		Storage Temperature (Note 3)	-10 to +60℃
		Operating Humidity Range	20 to 80%
Rated Voltage	30V AC	Storage Humidity Range (Note 3)	40 to 70%

Item	Standards	Condition
Insulation Resistance	50MΩ Min.	Measured at 100V DC
Withstanding Voltage	No insulation breakdown	100V AC applied for 1 min.
Contact Resistance	Signal: 80mΩ Max. GND: 80mΩ Max.	100mA (0 or 1000 Hz) measurement
Vibration Resistance	No electrical discontinuity of 1 μs or more	Frequency 10 to 55 Hz, half amplitude 0.75 mm, 10 cycles each in 3 directions
Humidity Resistance	Contact Resistance (amount of change from initial stage) 50mΩ Max., Insulation Resistance 25MΩ Min.	Temperature 40±2℃, Humidity 90 to 95%, Left for 96 hours
Temperature Cycle	Contact Resistance (amount of change from initial stage) 50mΩ Max., Insulation Resistance 25MΩ Min.	(-55℃ : 30 min. -- > 5 to 35℃ : 2 to 3 min. -- > 85℃ : 30 min. -- > 5 to 35℃ : 2 to 3 min.) 5 cycles
Mating Durability	Contact Resistance (change from initial stage) 50mΩ Max.	30 times
Solder Heat Resistance	No dissolution or resin melting that will affect performance.	Reflow : Recommended in Temperature Profile Hand solder: Soldering Iron Temperature 350℃, 3 seconds

Note 1 : Only the temperature rise at the connector is included, not the cable temperature rise.
Note 2 : Includes temperature rise caused by current flow.
Note 3 : Storage refers to the long-term storage condition for unused products before the board mounting.
Operating temperature and humidity range apply when the product is not powered after PCB mounting and when temporarily stored during transportation.

Materials / Finish

Item	Component	Material	Color/Finish	Remarks
Receptacle (Standard Type)	Insulator	LCP	Black	UL94V-0
	Contact	Phosphorous Bronze	Gold Plating	-
	Retention Tab	Phosphorous Bronze	Tin Plating	-
Plug (Standard Type)	Insulator	LCP	Beige (Natural), Black	UL94V-0
	Contact	Phosphorous Bronze	Gold Plating	-
	Exterior Shell	Phosphorous Bronze	Tin Plating	-
Receptacle (Space-Saving Type)	Insulator	LCP	Black	UL94V-0
	Contact	Phosphorous Bronze	Gold Plating	-
	Retention Tab	Phosphorous Bronze	Gold Plating	-
Plug (Space-Saving Type)	Insulator	LCP	Beige (Natural), Black	UL94V-0
	Contact	Phosphorous Bronze	Gold Plating	-
	Exterior Shell	Phosphorous Bronze	Gold Plating	-

Aug.1.2026 Copyright 2026 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

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.

■ Connector

DF36 A - # S - 0.4 V (##)
❶ ❷ ❸ ❹ ❺ ❻ ❼

DF36 A - # P - SHL
❶ ❷ ❸ ❹ ❽

❶ Series Name	DF36	❹ Connector Type	S: Receptacle P: Plug
❷ Shape Symbol	Receptacle/Shell A: Standard Type None: Space-Saving Type Plug None: Standard Type, Space-Saving Type	❺ Contact Pitch	0.4mm
		❻ Termination Type	V : Straight SMT SD: Micro-Coaxial Plug
❸ No. of Pos.	Standard Type: 15, 25, 30, 40, 45, 50 Space-Saving Type: 15, 20, 25	❼ Packing Type	(51): Embossed Packing (55): Embossed Packing
		❽ Mounting Parts	SHL: Exterior Shell

Combinations

● Standard Use

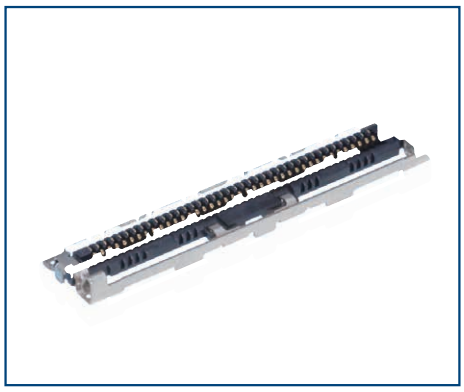
DF36(A)-#S-0.4V(##) ＋ DF36(A)-#P-ASSY [DF36-#P-0.4SD(##) ＋ DF36(A)-#P-SHL]

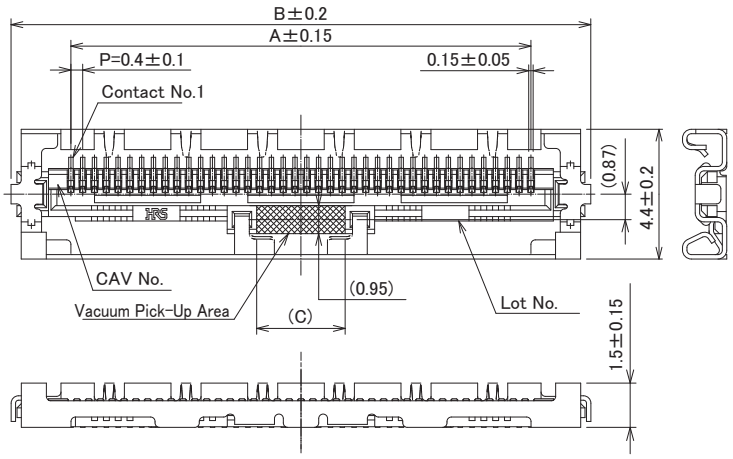
Note 1 : The product specification of the above combination is shown on Product Specifications.
Note 2 : ASSY shows harness items.

Aug.1.2026 Copyright 2026 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

Receptacle (SMT)

● Standard Type



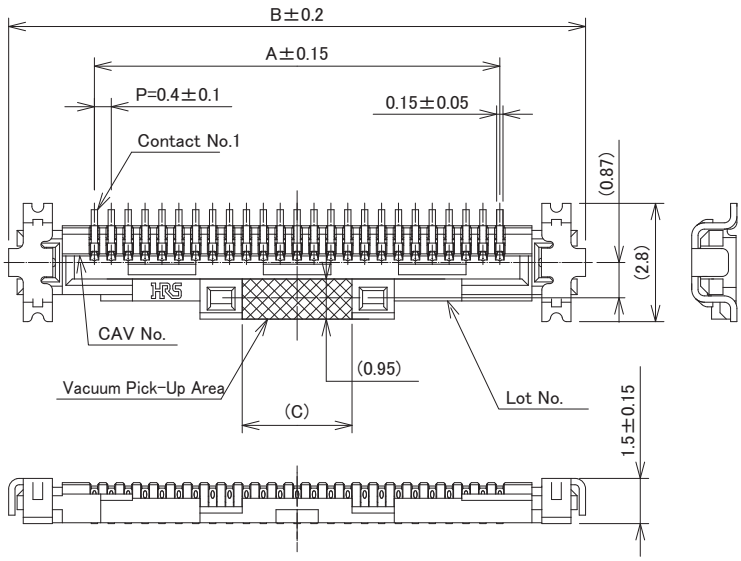


Unit : mm

Part No.	HRS No.	No. of Pos.	A	B	C	Purchase Unit (##):(51)	Purchase Unit (##):(55)
DF36A-15S-0.4V(##)	CL0662-4509-5-##	15	5.6	9.66	2.6	4,000pcs per reel	500pcs per reel
DF36A-25S-0.4V(##)	CL0662-4011-4-##	25	9.6	13.66	2.6		
DF36A-30S-0.4V(##)	CL0662-4017-0-##	30	11.6	15.66	3		
DF36A-40S-0.4V(##)	CL0662-4003-6-##	40	15.6	19.66	3		
DF36A-45S-0.4V(##)	CL0662-4008-0-##	45	17.6	21.66	3		
DF36A-50S-0.4V(##)	CL0662-4043-0-##	50	19.6	23.66	3		

Note 1 : Please order embossed tape packaged items by the reel.
Note 2 : The 15 pos. does not have a lot stamp.

● Space-Saving Type



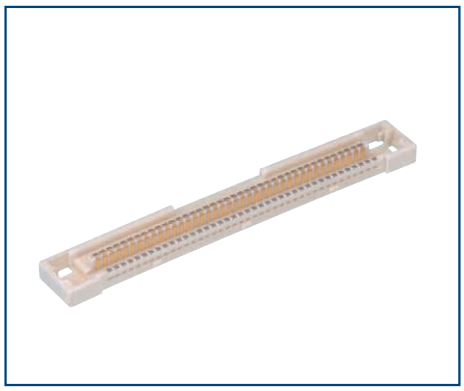
Unit : mm

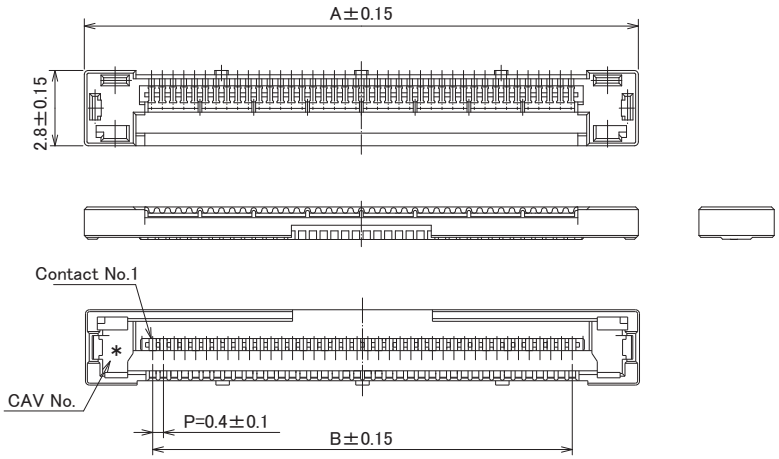
Part No.	HRS No.	No. of Pos.	A	B	C	Purchase Unit (##):(51)	Purchase Unit (##):(55)
DF36-15S-0.4V(##)	CL0662-4031-1-##	15	5.6	9.66	2.6	5,000pcs per reel	500pcs per reel
DF36-20S-0.4V(##)	CL0662-4039-3-##	20	7.6	11.66	2.6		
DF36-25S-0.4V(##)	CL0662-4005-1-##	25	9.6	13.66	2.6		

Note 1 : Please order embossed tape packaged items by the reel.
Note 2 : The 15 pos. does not have a lot stamp.

Aug.1.2026 Copyright 2026 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

Plug



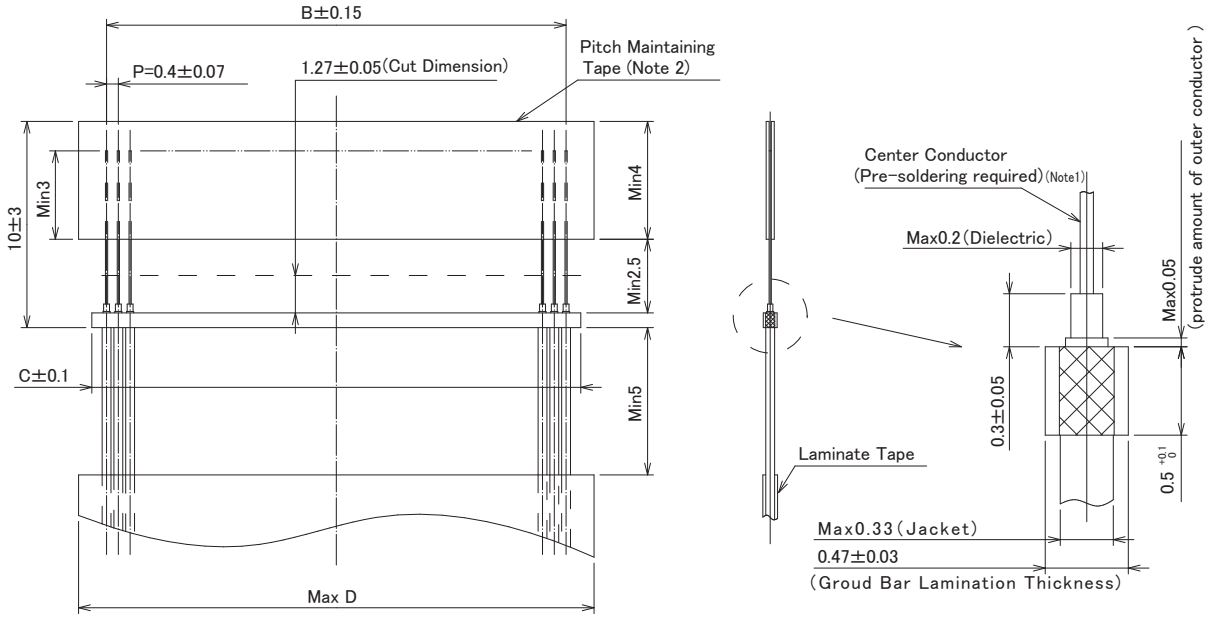


Unit : mm

Part No.	HRS No.	No. of Pos.	A	B	C	D	Purchase Unit (##):(51)	Purchase Unit (##):(55)
DF36C-15P-0.4SD(##)	CL0662-4035-2-##	15	11.4	5.6	6.6	7.5	5,000pcs per reel	500pcs per reel
DF36-20P-0.4SD(##)	CL0662-4040-2-##	20	12.6	7.6	8.6	9.5		
DF36-25P-0.4SD(##)	CL0662-4006-4-##	25	14.6	9.6	10.6	11.5		
DF36-30P-0.4SD(##)	CL0662-4018-3-##	30	16.6	11.6	12.6	13.5		
DF36-40P-0.4SD(##)	CL0662-4002-3-##	40	20.6	15.6	16.6	17.5		
DF36-45P-0.4SD(##)	CL0662-4009-2-##	45	22.6	17.6	18.6	19.5	4,000pcs per reel	-
DF36-50P-0.4SD(##)	CL0662-4044-3-##	50	24.6	19.6	20.6	21.5	5,000pcs per reel	500pcs per reel

Note 1 : Please order embossed tape packaged items by the reel.
Note 2 : An exterior Shell (DF36(A)-#P-SHL) is required for wire connection.
Compatible exterior shell is Tin plating for standard type and Gold plating for space-saving type.

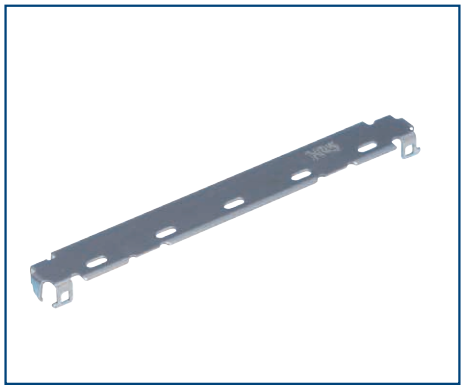
■ Recommended Fine Coaxial Cable Preparation

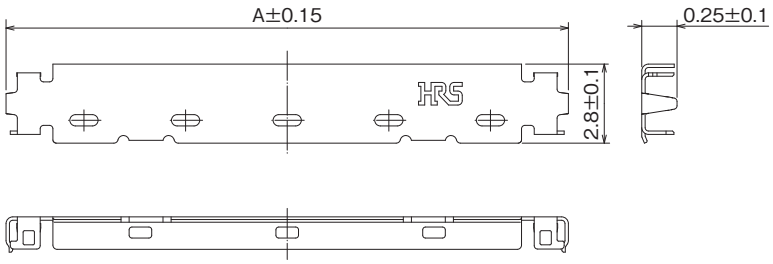


Note 1 : Center conductor requires pre-soldering (lead-free).
Note 2 : The taping of the tip is an example.

Aug.1.2026 Copyright 2026 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

Exterior Shell





Standard Type

Unit : mm

Part No.	HRS No.	Plating	No. of Pos.	A	Purchase Unit
DF36A-15P-SHL	CL0662-4511-7-00	Tin	15	9.92	10,000pcs per reel
DF36A-25P-SHL	CL0662-4007-7-00		25	13.92	
DF36A-30P-SHL	CL0662-4019-6-00		30	15.92	
DF36A-40P-SHL	CL0662-4013-0-00		40	19.92	
DF36A-45P-SHL	CL0662-4010-1-00		45	21.92	
DF36A-50P-SHL	CL0662-4045-6-00		50	23.92	

Space-Saving Type

Unit : mm

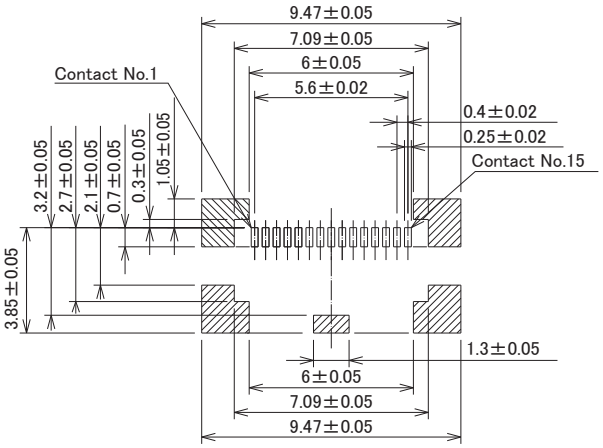
Part No.	HRS No.	Plating	No. of Pos.	A	Purchase Unit
DF36-15P-SHL	CL0662-4026-1-00	Gold	15	9.92	10,000pcs per reel
DF36-20P-SHL	CL0662-4041-5-00		20	11.92	
DF36-25P-SHL	CL0662-4012-7-00		25	13.92	

Aug.1.2026 Copyright 2026 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

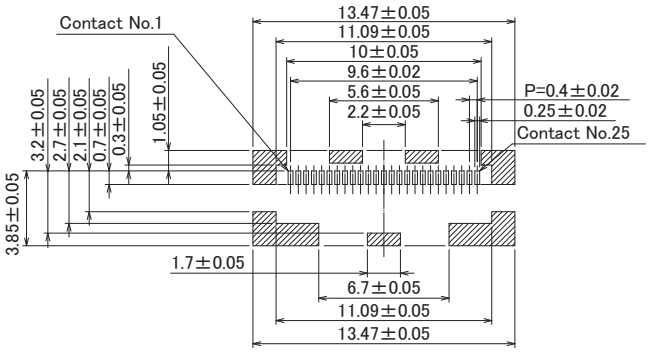
Recommended PCB Pattern

Standard Type

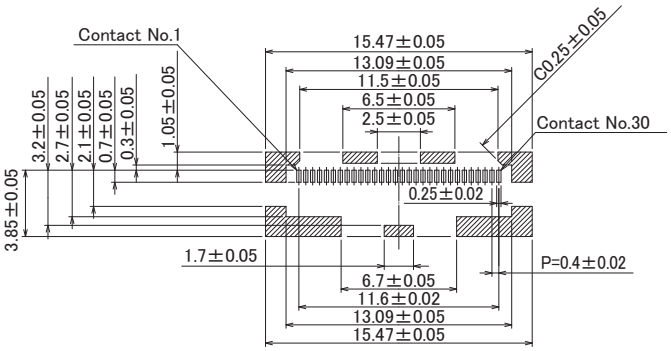
●15pos.



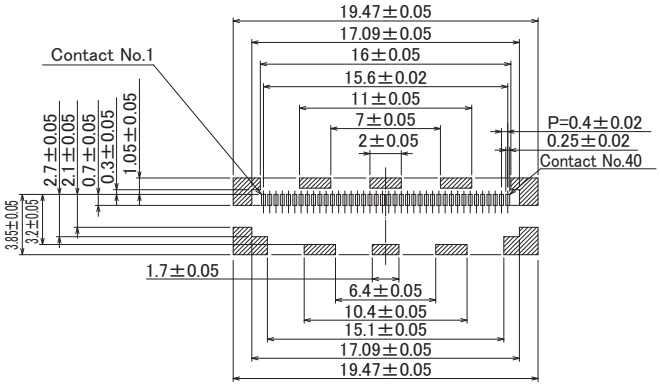
●25pos.



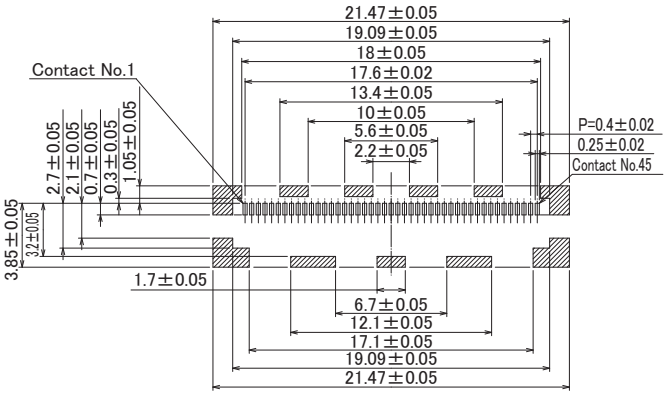
●30pos.



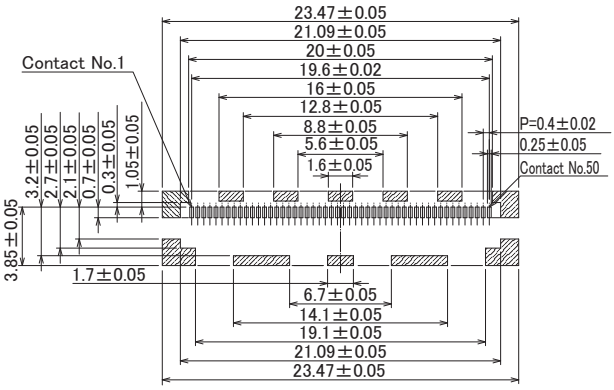
●40pos.



●45pos.



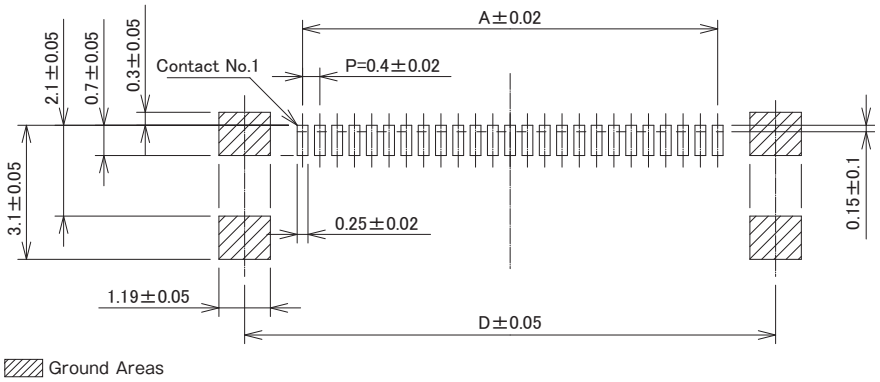
●50pos.



Ground Areas

Aug.1.2026 Copyright 2026 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

Space-Saving Type



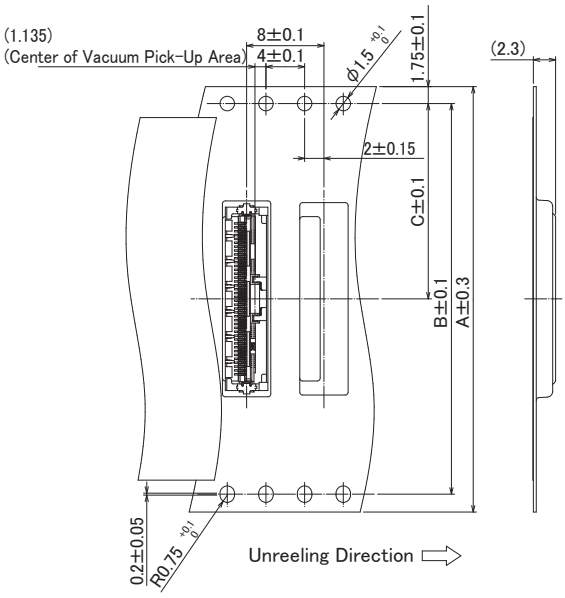
Unit : mm

Part No.	HRS No.	No. of Pos.	A	D	Purchase Unit (##):(51)	Purchase Unit (##):(55)
DF36-15S-0.4V(##)	CL0662-4031-1-##	15	5.6	8.28	5,000pcs per bag	500pcs per bag
DF36-20S-0.4V(##)	CL0662-4039-3-##	20	7.6	10.28		
DF36-25S-0.4V(##)	CL0662-4005-1-##	25	9.6	12.28		

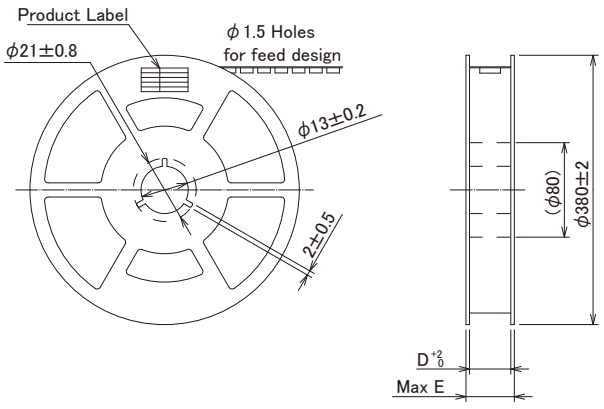
Packaging Specifications Diagram (IEC 60286 Compliant)

Receptacle (Standard Type)

● Embossed Carrier Tape Dimensions



● Reel Dimensions



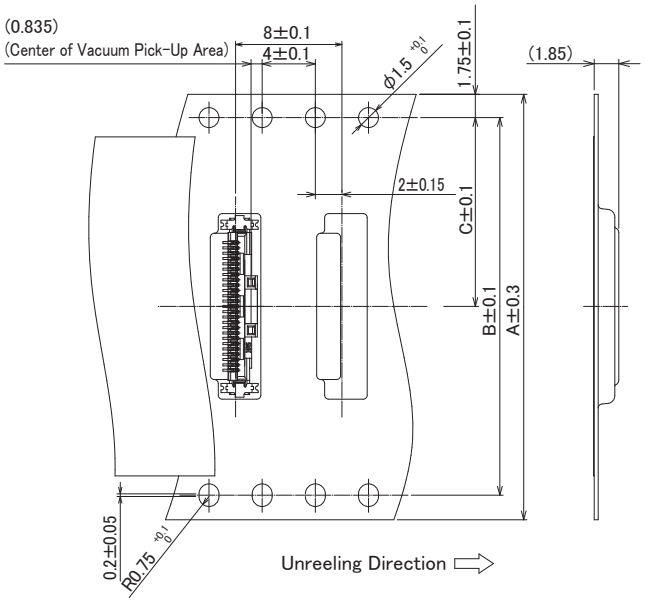
Unit : mm

Part No.	HRS No.	No. of Pos.	A	B	C	D	E	Purchase Unit (##):(51)	Purchase Unit (##):(55)
DF36A-15S-0.4V(##)	CL0662-4509-5-##	15	32	28.4	14.2	32.4	38.4	4,000pcs per bag	500pcs per bag
DF36A-25S-0.4V(##)	CL0662-4011-4-##	25	32	28.4	14.2	32.4	38.4		
DF36A-30S-0.4V(##)	CL0662-4017-0-##	30	32	28.4	14.2	32.4	38.4		
DF36A-40S-0.4V(##)	CL0662-4003-6-##	40	44	40.4	20.2	44.4	50.4		
DF36A-45S-0.4V(##)	CL0662-4008-0-##	45	44	40.4	20.2	44.4	50.4		
DF36A-50S-0.4V(##)	CL0662-4043-0-##	50	44	40.4	20.2	44.4	50.4		

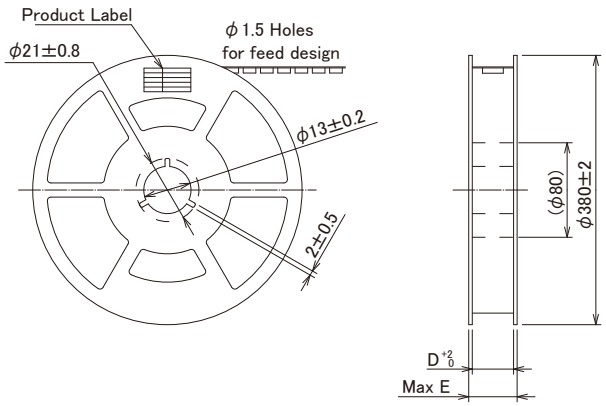
Aug.1.2026 Copyright 2026 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

Receptacle (Space-Saving Type)

● Embossed Carrier Tape Dimensions



● Reel Dimensions



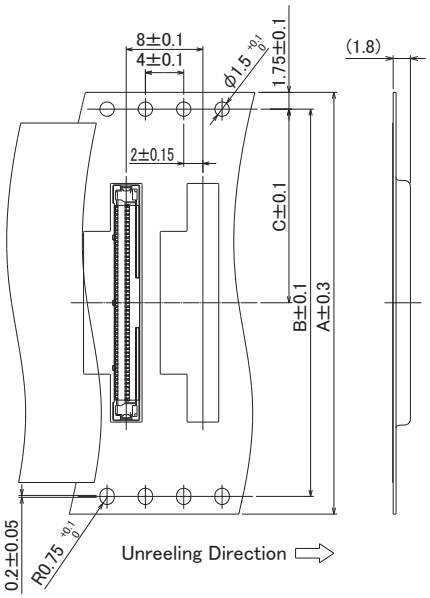
Unit : mm

Part No.	HRS No.	No. of Pos.	A	B	C	D	E	Purchase Unit (##):(51)	Purchase Unit (##):(55)
DF36-15S-0.4V(##)	CL0662-4031-1-##	15	32	28.4	14.2	32.4	38.4	5,000pcs per bag	500pcs per bag
DF36-20S-0.4V(##)	CL0662-4039-3-##	20	32	28.4	14.2	32.4	38.4		
DF36-25S-0.4V(##)	CL0662-4005-1-##	25	32	28.4	14.2	32.4	38.4		

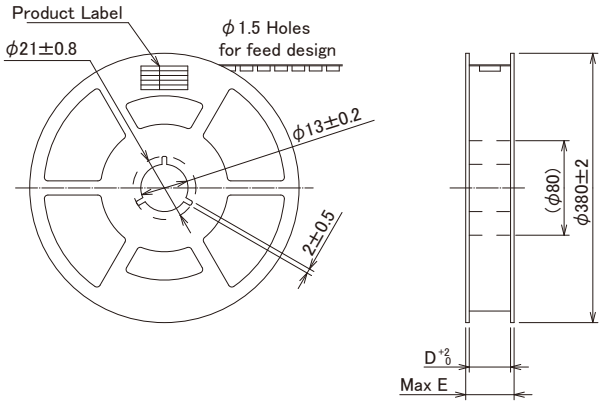
Aug.1.2026 Copyright 2026 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

Plug

● Embossed Carrier Tape Dimensions



● Reel Dimensions



Unit : mm

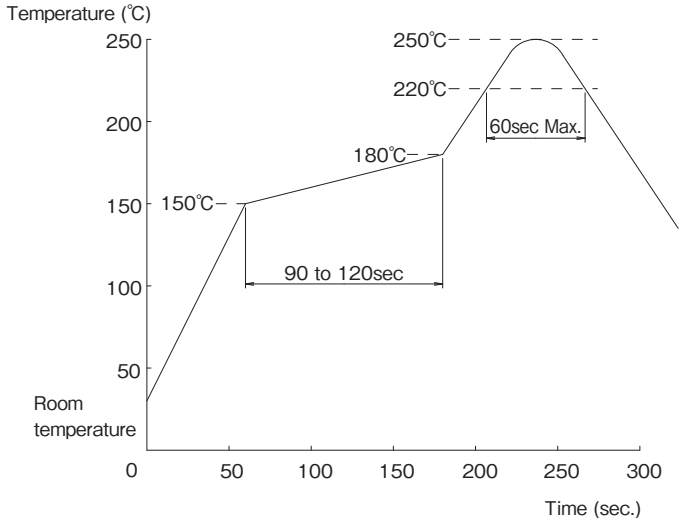
Part No.	HRS No.	No. of Pos.	A	B	C	D	E	Purchase Unit (##):(51)	Purchase Unit (##):(55)
DF36C-15P-0.4SD(##)	CL0662-4035-2-##	15	32	28.4	14.2	14.2	32.4	5,000pcs per reel	500pcs per reel
DF36-20P-0.4SD(##)	CL0662-4040-2-##	20	32	28.4	14.2	14.2	32.4		
DF36-25P-0.4SD(##)	CL0662-4006-4-##	25	32	28.4	14.2	14.2	32.4		
DF36-30P-0.4SD(##)	CL0662-4018-3-##	30	32	28.4	14.2	14.2	32.4		
DF36-40P-0.4SD(##)	CL0662-4002-3-##	40	44	40.4	20.2	20.2	44.4		
DF36-45P-0.4SD(##)	CL0662-4009-2-##	45	44	40.4	20.2	20.2	44.4	4,000pcs per reel	-
DF36-50P-0.4SD(##)	CL0662-4044-3-##	50	44	40.4	20.2	20.2	44.4	5,000pcs per reel	500pcs per reel

Extraction Tool

For details about the extraction tool, please contact your Hirose sales representative.

Aug.1.2026 Copyright 2026 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

Temperature Profile

Recommended Temperature Profile (Lead-Free Mounting)	 【Conditions】 1. Peak Temperature : 250℃ Max. 2. Heating : 220℃ Min., within 60sec. 3. Preheating : 150 to 180℃ , 90 to 120sec. 4. Number of Reflow Cycles : 2 cycles Max. *Solder Composition : Sn-3Ag-0.5Cu Note : Temperature refers to the surface temperature of the board near the connector lead.
Recommended Manual Soldering Conditions	Soldering iron temperature : 350℃ Max., Soldering Time : Within 3 sec.
Recommended Metal Mask Thickness and Open Area to PCB Pattern (Area Ratio)	Standard Type Thickness : 0.1mm / Aperture Ratio : Lead Part 90%, Ground Part 100% Space-Saving Type Thickness : 0.1mm / Aperture Ratio : Lead Part 90%, Ground Part 90%
Board Warpage	Max. of 0.02mm at the center in reference to both ends of the connector.
Cleaning	Cleaning is not recommended. If you clean this product, please evaluate its performance before using it. (Cleaning may impair the mating/unmating properties and lower resistance to environmental factors.)

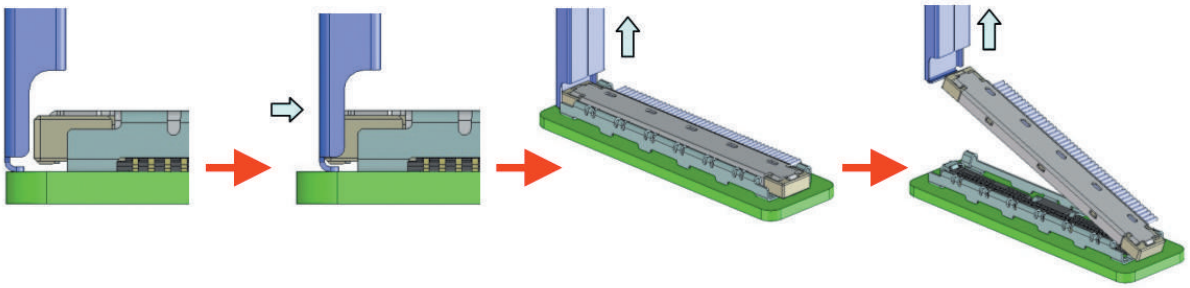
Connector Operation and Precautions

Connector Mating / Unmating

[Standard Type]

・When inserting a plug, push the entire plug surface straight and insert.
Please note that holding the wire when inserting may cause diagonal insertion and may cause broken etc.

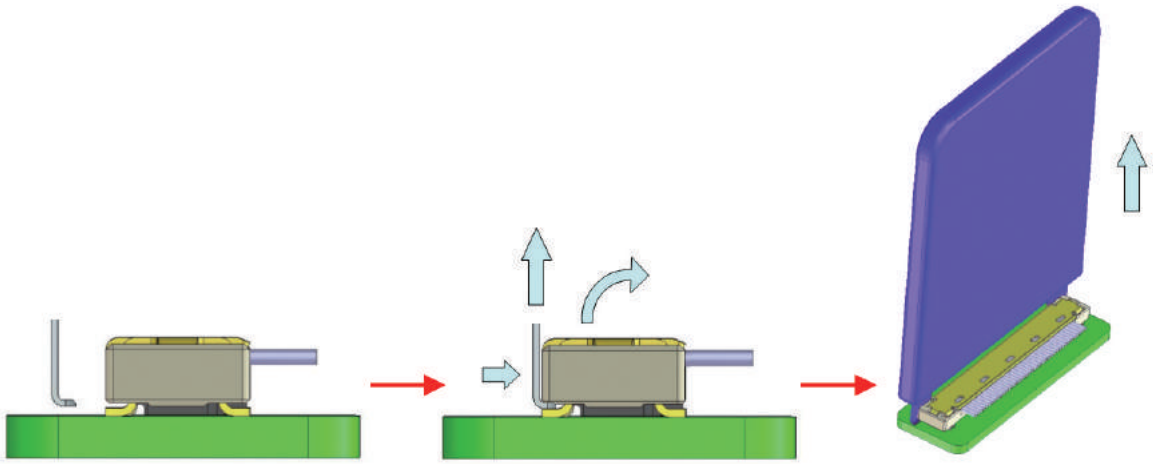
・To remove the plug, use a special pulling jig and pull it straight upward as shown below.
Do not remove the cable by holding wire, as it may cause cable disconnection, connector broken, etc.



Aug.1.2026 Copyright 2026 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

[Space-Saving Type]

・Insert the plug in the same way as the standard type.
・To remove the plug, use a special pulling jig, hook the jig on the front side of the connector as shown below and pull it straight upward.
Do not remove the cable by holding wire, as it may cause cable disconnection, connector broken, etc.



Note 1 : Do not mate / unmate the connectors when receptacle is not mounted on the board.
Note 2 : In the manual soldering process, don't carry out the flux coating which will cause a flux blister on the connector.
Note 3 : This product may have slight color differences due to production lot variability, but this does not affect the performance.
Note 4 : Excessive twisting insertion or extraction may result in damage.

Aug.1.2026 Copyright 2026 HIROSE ELECTRIC CO., LTD. All Rights Reserved.

While Taking into Consideration

Specifications mentioned in this catalog are reference values.
When considering to order or use this product, please review the Drawing and Product Specifications sheets.
Use an appropriate cable when using the connector in combination with cables.
If considering usage of a non-specified cable, please contact your sales representative.
If assembly process is done by jigs & tools which are not identified by Hirose, the warranty of the product may be affected.
If considering usage for below mentioned applications, please contact your sales representative.
In cases where the application will demand a high level of reliability, such as automotive, medical instruments, public infrastructure, aerospace/defense etc. Hirose must review before assurance of reliability can be given.

HIROSE ELECTRIC CO.,LTD. 2-6-3,Nakagawa Chuoh,Tsuzuki-Ku,Yokohama-Shi 224-8540,JAPAN
https://www.hirose.com

※The contents of this catalog are current as of date of 6/2023. Contents are subject to change without notice for the purpose of improvements.
※The HRS logo and "HIROSE" are trademarks of HIROSE ELECTRIC CO., LTD.