Circular Connectors Conforming to JIS C 5432

JR Series



Features

1. These round connectors conform to JIS C 5432 "Circular connectors for electric appliances."

勝 特 力 材 料 886-3-5753170
胜特力电子(上海) 86-21-34970699
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Http://www.100y.com.tw

Product Specifications

		Shell size	Number of contacts	Rated current
Ratings	Rated current	13	3	10A
			5	5A
		16	7	10A
			10, 14	5A
		21	10	10A
			16	5A (Crimp type: 3A)
			26	5A (Contact numbers A and B only: 10A)
		25	4	30A
			5, 16	10A
			24	5A (Crimp type: 3A)

		Shell size	Number of contacts	Rated current
Ratings	Rated voltage	13	3, 5	AC250, DC350V
		16	7, 10, 14	AC250, DC350V
		21	10, 16, 26	AC250, DC350V
		25	4, 5 16, 24	AC1000V, DC1400V AC250, DC350V

Ratings	Operating temperature range	-25 to 85℃
	Storage temperature range	-10 to 60℃

Items	Specifications	Conditions
1. Contac resistance	5 mΩ max. JR 21-16 contact crimping type: 10 mΩ max. JR 25-24 contact crimping type: 10 mΩ max.	Measured at DC 1 A
2. Insulation resistance	1,000 MΩ min. JR 25-4 and 5 contacts: 10,000 mΩ min.	Measured at DC 500 V
3. Withstanding voltage	No flashover or dielectric breakdown.	AC 1,000 V for one minute JR 25-4, 5 contacts: AC 3,000 V for one minute
4. Vibration resistance	No electrical discontinuity for 10 μs or greater	10 to 55 Hz/cycle, amplitude: 0.75 mm, 3 directions, 2 hours each
5. Shock resistance	No electrical discontinuity for 10 μs or greater	Acceleration: 490 m/s^2, duration: 11 ms, 3 axis directions, 3 cycles each
6. Mating cycles	Contact resistance: 10 mΩ max.	500 times
7. Temperature cycle	Insulation resistance: 1,000 MΩ min. JR 25-4 and 5 contacts: Insulation resistance: 10,000 MΩ min.	-40℃: 30 minutes → Normal temperature: 10 to 15 minutes → 100℃: 30 minutes → Normal temperature: 10 to 15 minutes, left for 5 cycles
8. Moisture resistance	Insulation resistance (when dry) 100 MΩ min. 5,000 MΩ min. : JR 25-4 , 5 contacts	Temperature: 40℃, relative humidity: 90 to 95%, left for 96 hours

Materials

Part	Material	Finish	Remarks
Shell	Aluminum alloy	Nickel plating	———
Insulator	Phenol resin PPS resin	———	UL94V-0
Contact	Copper alloy	Silver plating	———

■Ordering Information

JR 16 P A - 10 S C (**)
❶ ❷ ❸ ❹ ❺ ❻ ❼ ❽

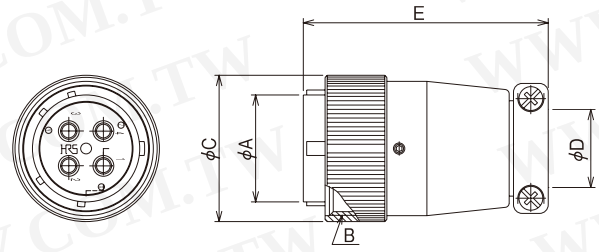
❶Model name: JR Series	❺Number of contacts
❷Shell size: The shell size is the outer shell diameter of the mating end of the plug.	❻Contact form P: Male contact S: Female contact
❸Shell type P : Threaded lock plug　J : Threaded lock jack R : Threaded lock receptacle　BP : Bayonet-lock plug RC : Threaded lock receptacle cap　BR : Bayonet-lock receptacle	❼Contact termination method: None : Solder termination C : Crimp termination
❹Shell variation: Letters such as A, B, C, etc. indicate variations in the shell.	❽Other specifications: A two-digit number is added to indicate other specifications.

■Solder Type

●Threaded lock plug



JR25PH-4S



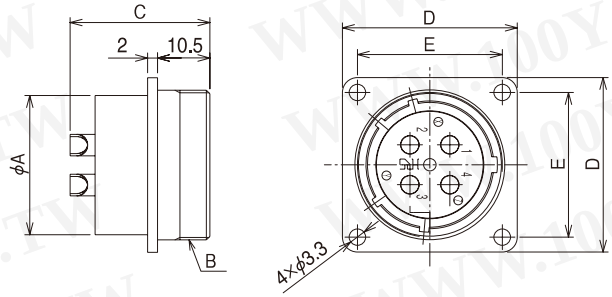
HRS No.	Part No.	No. of contacts	φA	B	φC	φD	E	JIS No.
114-0501-7 71	JR13PK-3P(71)	3	12.7	M18×1	21.8	8.5	45.5	CNR01SPM013003
114-0502-0 71	JR13PK-5P(71)	5						CNR01SPM013005
114-0503-2 71	JR16PK-7P(71)	7	16.3	M22×1	25.8	11.5	49.5	CNR01SPM016007
114-0504-5 71	JR16PK-10P(71)	10						CNR01SPM016010
114-0505-8 71	JR21PK-10P(71)	10	20.5	M26×1	29.8	15	53.5	CNR01SPM021010
114-0506-0 71	JR21PK-16P(71)	16						CNR01SPM021016
114-0507-3 71	JR25PK-16P(71)	16	24.7	M30×1	33.8	18	56.5	CNR01SPM025016
114-0508-6 71	JR25PK-24P(71)	24						CNR01SPM025024
114-0626-2	JR25PH-4P	4						————
114-0624-7	JR25PH-5P	5						————
114-0509-9 71	JR13PK-3S(71)	3	12.7	M18×1	21.8	8.5	45.5	CNR01SPF013003
114-0510-8 71	JR13PK-5S(71)	5						CNR01SPF013005
114-0511-0 71	JR16PK-7S(71)	7	16.3	M22×1	25.8	11.5	49.5	CNR01SPF016007
114-0512-3 71	JR16PK-10S(71)	10						CNR01SPF016010
114-0513-6 71	JR21PK-10S(71)	10	20.5	M26×1	29.8	15	53.5	CNR01SPF021010
114-0514-9 71	JR21PK-16S(71)	16						CNR01SPF021016
114-0515-1 71	JR25PK-16S(71)	16	24.7	M30×1	33.8	18	56.5	CNR01SPF025016
114-0516-4 71	JR25PK-24S(71)	24						CNR01SPF025024
114-0627-5	JR25PH-4S	4						————

■Solder Type

●Threaded lock receptacle



JR25RH-4P



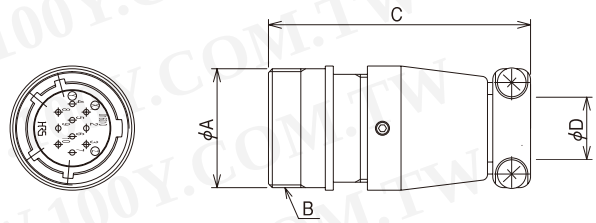
HRS No.	Part No.	No. of contacts	ϕA	B	C	D	E	JIS No.
114-0517-7	JR13RK-3P	3	15.9	M18×1	26.6	26	20	CNR01SRM013003
114-0518-0	JR13RK-5P	5			26.1			CNR01SRM013005
114-0519-2	JR16RK-7P	7	19.9	M22×1	26.6	29	23	CNR01SRM016007
114-0520-1	JR16RK-10P	10			26.1			CNR01SRM016010
114-0521-4	JR21RK-10P	10	23.9	M26×1	26.6	32	26	CNR01SRM021010
114-0522-7	JR21RK-16P	16			26.1			CNR01SRM021016
114-0523-0	JR25RK-16P	16	27.9	M30×1	26.6	35	29	CNR01SRM025016
114-0524-2	JR25RK-24P	24			26.1			CNR01SRM025024
114-0628-8	JR25RH-4P	4			28			———
114-0525-5	JR13RK-3S	3	15.9	M18×1	28	26	20	CNR01SRF013003
114-0526-8	JR13RK-5S	5			27			CNR01SRF013005
114-0527-0	JR16RK-7S	7	19.9	M22×1	28	29	23	CNR01SRF016007
114-0528-3	JR16RK-10S	10			27			CNR01SRF016010
114-0529-6	JR21RK-10S	10	23.9	M26×1	28	32	26	CNR01SRF021010
114-0530-5	JR21RK-16S	16			27			CNR01SRF021016
114-0531-8	JR25RK-16S	16	27.9	M30×1	28	35	29	CNR01SRF025016
114-0532-0	JR25RK-24S	24			27			CNR01SRF025024
114-0629-0	JR25RH-4S	4			28			———
114-0625-0	JR25RH-5S	5			27.8			———

■Solder Type

●Threaded lock jack



JR25JK-24P



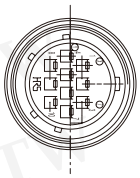
HRS No.	Part No.	No. of contacts	ϕA	B	C	ϕD
114-0533-3	JR13JK-3P	3	19	M18×1	44.5	8.5
114-0534-6	JR13JK-5P	5				
114-0535-9	JR16JK-7P	7	23	M22×1	48.5	11.5
114-0536-1	JR16JK-10P	10				
114-0537-4	JR21JK-10P	10	27	M26×1	52.5	15
114-0538-7	JR21JK-16P	16				
114-0539-0	JR25JK-16P	16	31	M30×1	55.5	18
114-0540-9	JR25JK-24P	24				
114-0541-1	JR13JK-3S	3	19	M18×1	44.5	8.5
114-0542-4	JR13JK-5S	5				
114-0543-7	JR16JK-7S	7	23	M22×1	48.5	11.5
114-0544-0	JR16JK-10S	10				
114-0545-2	JR21JK-10S	10	27	M26×1	52.5	15
114-0546-5	JR21JK-16S	16				
114-0548-0	JR25JK-24S	24	31	M30×1	55.5	18

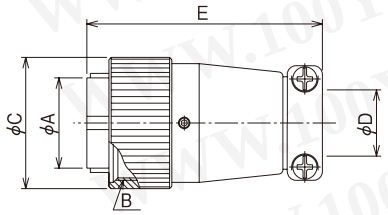
■Crimp Type

●Threaded lock plug



JR21PK-10PC(71)



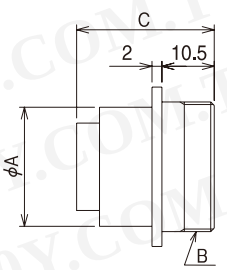


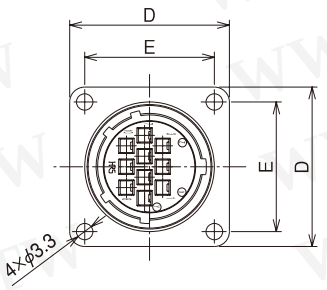
HRS No.	Part No.	No. of contacts	ϕA	B	ϕC	ϕD	E	Remarks
114-0570-0 71	JR21PK-10PC(71)	10	20.5	M26×1	29.8	15	53.5	Contact ϕ1.6
114-0571-2 71	JR21PK-10SC(71)							
114-0572-5 71	JR21PK-16PC(71)	16						Contact ϕ1
114-0573-8 71	JR21PK-16SC(71)							
114-0574-0 71	JR25PK-24PC(71)	24	24.7	M30×1	33.8	18	56.5	
114-0575-3 71	JR25PK-24SC(71)							

●Threaded lock receptacle



JR21RK-10SC



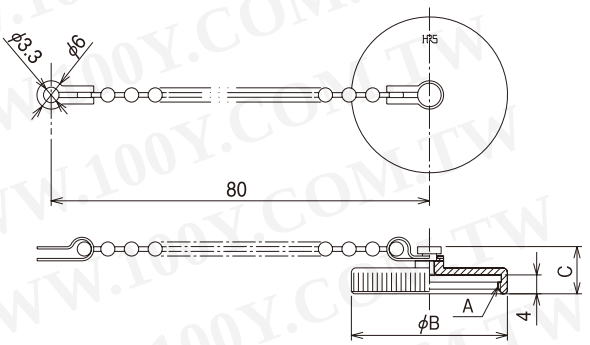


HRS No.	Part No.	No. of contacts	ϕA	B	C	D	E	Remarks
114-0577-9	JR21RK-10SC	10	23.9	M26×1	27.6	32	26	Contact ϕ1.6
114-0578-1	JR21RK-16PC	16			25.4			Contact ϕ1
114-0579-4	JR21RK-16SC				23			
114-0581-6	JR25RK-24SC	24	27.9	M30×1	23	35	29	

●Threaded lock receptacle cap



JRC25RC(71)



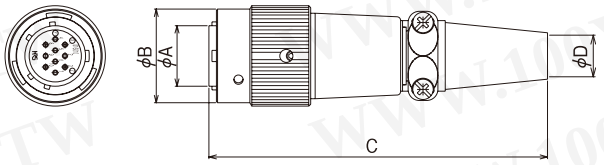
HRS No.	Part No.	A	ϕB	C	JIS No.
114-0053-8 71	JRC13RC(71)	M18×1	21	10	CNR01RC013
114-0054-0 71	JRC16RC(71)	M22×1	25		CNR01RC016
114-0055-3 71	JRC21RC(71)	M26×1	29		CNR01RC021
114-0056-6 71	JRC25RC(71)	M30×1	33		CNR01RC025

■Solder Type

●Bayonet - lock plug



JRC16BP-10P(71)



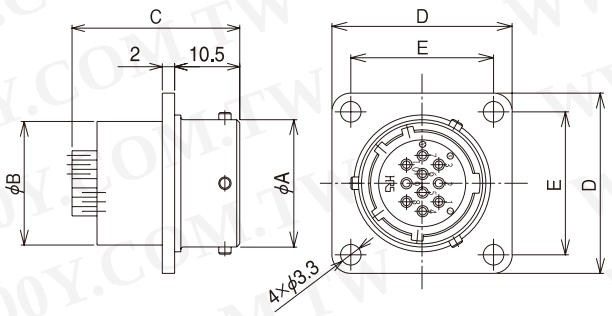
HRS No.	Part No.	No. of contacts	φA	φB	C	φD
114-0253-7 71	JRC16BP-7P(71)	7	16.3	27	91	11.2
114-0252-4 71	JRC16BP-10P(71)	10				
114-0251-1 71	JRC16BP-14P(71)	14				
114-0268-4 71	JRC21BPA-26P(71)	26	20.5	31	98	12.2
114-0256-5 71	JRC16BP-7S(71)	7	16.3	27	91	11.2
114-0254-0 71	JRC16BP-14S(71)	14				
114-0267-1 71	JRC21BP-26S(71)	26	20.5	31	98	12.2

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●Bayonet - lock receptacle



JRC16BR-10S(71)

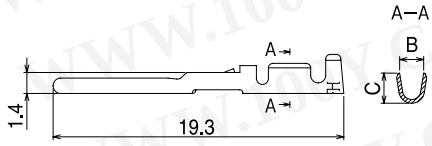


HRS No.	Part No.	No. of contacts	φA	φB	C	D	E
114-0259-3 71	JRC16BR-7P(71)	7	20.5	19.9	26.5	29	23
114-0257-8 71	JRC16BR-14P(71)	14			26.6		
114-0269-7 71	JRC21BR-26P(71)	26	25.8	23.9	26.8	32	26
114-0262-8 71	JRC16BR-7S(71)	7	20.5	19.9	27.7	29	23
114-0261-5 71	JRC16BR-10S(71)	10			26.5		
114-0260-2 71	JRC16BR-14S(71)	14			25.8		
114-0270-6	JRC21BRA-26S	26	25.8	23.9	28	32	26

◆Crimp Contacts

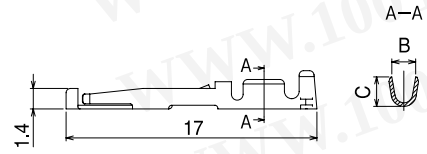
Contact diameter ϕ1.0mm

Male contact



Type	HRS No.	Part No.	B	C	Applicable wire
Loose contact	114-0243-3	JRC-PC2-112	1.6	2.0	AWG#20～24
	114-0244-6	JRC-PC2-122	1.45	1.5	AWG#24～28
Reel contact	114-0245-9	JRC-PC2-212	1.6	2.0	AWG#20～24
	114-0246-1	JRC-PC2-222	1.45	1.5	AWG#24～28

Female contact

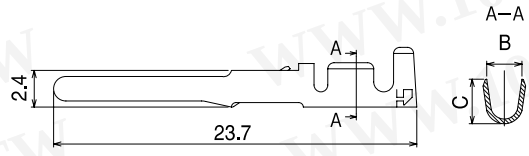


Type	HRS No.	Part No.	B	C	Applicable wire
Loose contact	114-0247-4	JRC-SC2-112	1.6	2.0	AWG#20～24
	114-0248-7	JRC-SC2-122	1.45	1.5	AWG#24～28
Reel contact	114-0249-0	JRC-SC2-212	1.6	2.0	AWG#20～24
	114-0250-9	JRC-SC2-222	1.45	1.5	AWG#24～28

Note: Loose contact in pack of 100 pcs. Reel contact contains 8,000 pcs.

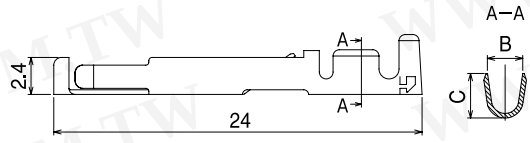
Contact diameter ϕ1.6mm

Male contact



Type	HRS No.	Part No.	B	C	Applicable wire
Loose contact	114-0239-6	JRC-PC-112	2.3	2.9	AWG#16～20
Reel contact	114-0240-5	JRC-PC-212			

Female contact



Type	HRS No.	Part No.	B	C	Applicable wire
Loose contact	114-0241-8	JRC-SC-112	2.3	2.9	AWG#16～20
Reel contact	114-0242-0	JRC-SC-212			

Note: Loose contact in pack of 100 pcs. Reel contact contains 5,000 pcs.

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Applicable Tools

Contact dia.	Type	Item	HRS No.	Part No.	Applicable terminal	Applicable wire
φ1	Manual	Manual crimping tool	150-0006-1	RM-TC-11	JRC-PC2-112 JRC-SC2-112	AWG#20～24
		Automatic crimping tool	150-0007-4	RM-TC-12	JRC-PC2-122 JRC-SC2-122	AWG#24～28
	Automatic	Applicator	901-0005-4	CM-105	———	———
			901-2037-1	AP105-JRC2-1	JRC-PC2-212 JRC-SC2-212	AWG#20～24
			901-2038-4	AP105-JRC2-2	JRC-PC2-222 JRC-SC2-222	AWG#24～28
	Extractor		150-0008-7	RM-TP	———	———
φ1.6	Manual	Manual crimping tool	150-0033-4	JRC-TC-11	JRC-PC-112 JRC-SC-112	AWG#16
			150-0034-7	JRC-TC-12	JRC-PC-112 JRC-SC-112	AWG#18～20
	Automatic	Automatic crimping tool	901-0005-4	CM-105	———	———
		Applicator	901-2039-7	AP105-JRC-1	JRC-PC-212 JRC-SC-212	AWG#16～20
	Extractor		150-0035-0	JRC-TP	———	———

Hand Tool Crimp



(For Contact Diameter φ1.0mm)



(For Contact Diameter φ1.6mm)

Extraction Tool



(For Contact Diameter φ1.0mm)



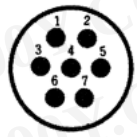
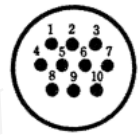
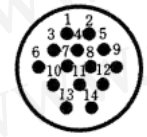
(For Contact Diameter φ1.6mm)

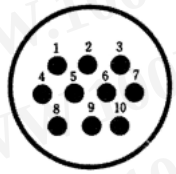
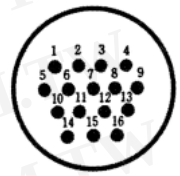
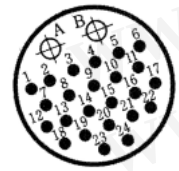


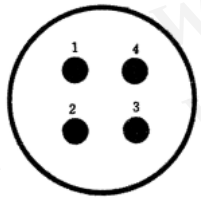
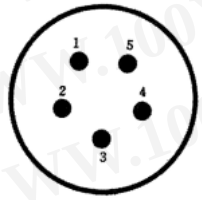
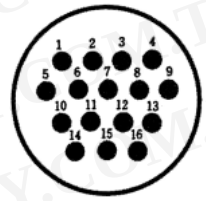
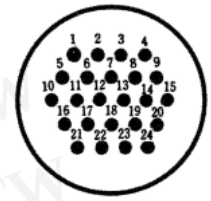
Automatic Crimping Machine CM-105

Contact Position Arrangement

Shell size				
13				
No. of contacts	3		5	
Withstanding voltage	AC1000V a minute			
Current rating	10A		5A	
Insulation resistance	1000MΩ MIN.			
Contact resistance	5mΩ MAX.			
Solderpot inner diameter	1.7mm dia.		1.1mm dia.	

Shell size			
16			
No. of contacts	7	10	14
Withstanding voltage	AC1000V a minute		
Current rating	10A	5A	
Insulation resistance	1000MΩ MIN.		
Contact resistance	5mΩ MAX.		
Solderpot inner diameter	1.7mm dia.		1.1mm dia.

Shell size				
21				
No. of contacts	10	16	26	
Withstanding voltage	AC1000V a minute			
Current rating	10A	5A (crimp type 3A)	5A	10A (only A, B)
Insulation resistance	1000MΩ MIN.			
Contact resistance	5mΩ MAX.	5mΩ MAX. (crimp type 10mΩ)	5mΩ MAX.	
Solderpot inner diameter	1.7mm dia.	1.1mm dia.		1.7mm dia. (only A, B)

Shell size				
25				
No. of contacts	4	5	16	24
Withstanding voltage	AC3000V a minute		AC1000V a minute	
Current rating	30A	10A		5A (crimp type 3A)
Insulation resistance	10,000MΩ MIN.		1000MΩ MIN.	
Contact resistance	5mΩ MAX.			5mΩ MAX. (crimp type 10mΩ)
Solderpot inner diameter	3.4mm dia.	1.7mm dia.		1.1mm dia.

Remarks: 1. Viewed from mating face.
2. The withstand voltage is the test value.

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