

MIL-DTL-83513 Micro-D Connectors

R04K Series Back to Back Crimping Connectors



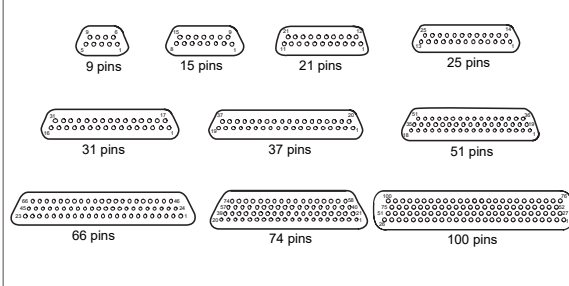
Brief Introduction

- Micro-D Connectors
- Twist Pin Contacts, High Density
- Metal Shell, Nickel or Cadmium Plating
- Back to Back Crimping Connectors
- The Sectional Area of Cable: $0.1\text{mm}^2 \sim 0.15\text{mm}^2$, 0.07mm^2
- Meets MIL-DTL-83513

Specifications

- Environment Temperature: $-55^\circ\text{C} \sim +125^\circ\text{C}$
- Vibration: $10\text{Hz} \sim 2000\text{Hz}$, 196m/s^2
- Random Vibration: Power spectrum density $0.4\text{G}^2/\text{Hz}$
root mean square value of total acceleration 23.1G
- Shock: 735m/s^2 11ms
- Rated Current: 3A
- Contact Resistance: $\leq 10\text{m}\Omega$
- Insulation Resistance: $\geq 5000\text{M}\Omega$
- Dielectric Strength: 800V
- Durability: 500 times

Contact Arrangements



How To Order

Sample Part Number	R04K	-25	PI	W7	G	A1	-26	9	10
Series: R04K—Back to Back Crimping Connectors									
Contact Number: 9, 15, 21, 25, 31, 37, 51, 66, 74, 100pins									
Contact Type: PI—Pin (Plug Connector Both Ends) RH—Socket(Receptacle Connector Both Ends) PH—Pin Connector to Socket Connectorg									
Locking Hardware Type: W7—Locking Hardware (See page 81) No Code—No Locking Hardware									
Shell Material and Finish: G—Aluminum Shell, Cadmium Plating No Code—Aluminum Shell, Nickel Plating U—Aluminum Shell, Gold Plating									
Cable Clamp Type: A1—Cable Clamp (See page 82) No Code—No Cable Clamp									
Wire Gage: 26—AWG26									
Wire Color: 9—White T—Ten Color Repeating									
Wire Length: 10—Wire Length in cm. "10" Specifies 10cm									



Free End Locking Hardware For R04K Series Crimping Connectors

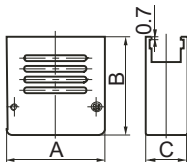
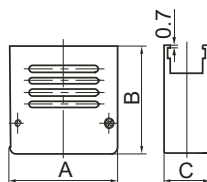
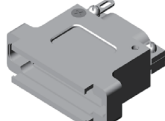
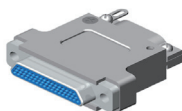
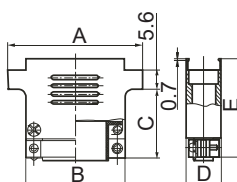
Type	A	B	Outline Dimensions	Assembly Picture	Matched with Locking Hardware
W	M2-6h	7.1			Q,Q0,Q2,Q3,Q4,Q5,Q7,Q8,Q9,Q10,Q11, Q14,Q15,Q17,Q23,Q25,Q29,Q32,Q35, Q36,Q37,Q41,Q42,Q43,Q45,Q46
W8	#2-56UNC-2A	7.1			Q1
W7	M2-6h	7.1			Q,Q0,Q2,Q3,Q4,Q5,Q7,Q8,Q9,Q10,Q11, Q14,Q15,Q17,Q23,Q25,Q29,Q32,Q35, Q36,Q37,Q41,Q42,Q43,Q45,Q46
W9					Q,Q0,Q2,Q3,Q4,Q5,Q7,Q8,Q9,Q10,Q11, Q14,Q15,Q17,Q23,Q25,Q29,Q32,Q35, Q36,Q37,Q41,Q42,Q43,Q45,Q46 Note: W9 is just suitable for R04JD series product.
N	M2-6h				Q,Q0,Q2,Q3,Q4,Q5,Q7,Q8,Q9,Q10,Q11, Q14,Q15,Q17,Q23,Q25,Q29,Q32,Q35, Q36,Q37,Q41,Q42,Q43,Q45,Q46
N1	#2-56UNC-2A				Q1

Fixed End Locking Hardware For R04K Series Crimping Connectors

Type	A	B	C	Outline Dimensions	Assembly Picture	Matched with Locking Hardware	
Q	M2-6h	M2-6h	12.6			W, W7, W9, N	Note: Use with front panel mounting crimping connectors
Q1	#2-56UNC-2B	#2-56UNC-2A	12.6			W8, N1	
Q8	M2-6h	M2-6h	15.6			W,W7,W9,N	
Q9	M2-6h	M2-6h	21.6			W,W7,N	
Q0	4.1	0.6	12.6			W, W7, W9, N	Note: Use with rear panel mounting crimping connectors
Q3	3.3	1.4	12.6				
Q4	2.5	2.2	12.6				
Q11	1.3	3.4	12.6				
Q45	2.7	2	20			W,W7,W9,N	Note: 1. Use with front panel mounting crimping connectors 2. For R04JS series
Q29	M3-6h	10.5	3.3min				
Q36	M3-6h	14.7	6min				
Q37	M2-6h	10	2.8min				
Q43	M3-6h	11.7	4min				Note: 1. No need to lock with free end locking hardware 2. Front panel mounting, "A" dimension is 2.5~3.5mm 3. Rear panel mounting, (1) Mated with connectors without locking hardware, "A" dimension is 3.5mm max (2) Mated with connectors with fixed end locking hardware, "A" dimension is 4.9mm minus 1.3mm (The distance between bolt and flange of connector)
Q44							

Remark: 1. Fixed end locking hardware applies to fix the connectors on the mounting panels or the PCB. Most fixed end locking hardware can be mated with free end locking hardware, but a little can not. (eg. Q44)
2. All dimensions are in mm.

R04K Series Cable Clamp

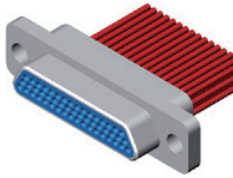
Type	Stereogram			Outline Dimensions			Using Conditions				
A1							1. For R04K Crimp Basic Type 2. For Free End Locking Hardware				
	Only A2 Cable Clamp	Plug With A1 Cable Clamp									
A2							For R04K-9~51PI/RH-Q8				
	Only A2 Cable Clamp	Plug With A2 Cable Clamp									
A3							For R04K Crimp Basic Type				
	Only A3 Cable Clamp	Plug With A3 Cable Clamp									
Pin Count	A1			A2			A3				
	A	B	C	A	B	C	A	B	C	D	E
9	9.9	23.6	10.4	11.7	22	13.4	19.6	9.9	18.2	10.4	27
15	13.8	23.8	10.4	15.6	22	13.4	23.5	13.8	18.2	10.4	27
21	17.6	23.6	10.4	19.4	22	13.4	27.4	17.6	19.2	10.4	28
25	20.2	23.6	10.4	22	22	13.4	29.8	20.2	19.2	10.4	28
31	24	23.6	10.4	25.8	22	13.4	33.6	24	19.2	10.4	28
37	27.8	23.6	10.4	29.6	22	13.4	37.4	27.8	19.2	10.4	28
51	26.6	26.6	11.2	28.4	22	14.6	36.4	26.6	21.2	11.2	30
66	33	26.6	11.2	---	---	---	42.9	29.1	21.2	11.2	30
74	29.1	30	12	---	---	---	38.8	29.1	21.2	12	30
100	40.7	30	12	---	---	---	54.7	40.7	21.2	12	30

Remark: All dimensions are in mm.

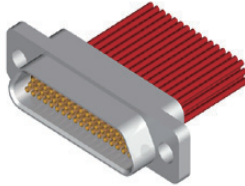


R04K Series Crimping Connectors - Basic Type

- **Contacts:** R04K- 9, 15, 21, 25, 31, 37, 51, 66, 74, 100 PI /RH(G)
- **Shell Plating:** Nickel or Cadmium



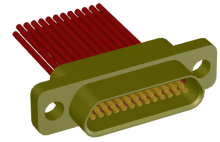
Plug:PI



Receptacle:RH

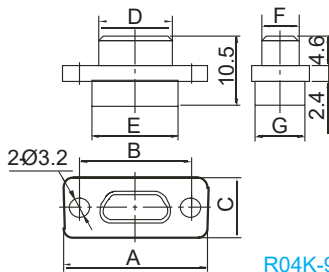


Plug:PIG

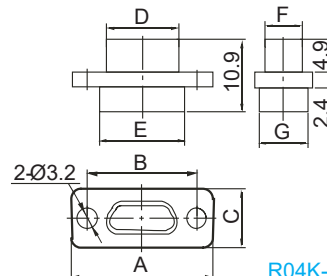


Receptacle:RHG

Outline Dimensions



R04K-9~100PI

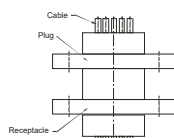


R04K-9~100RH

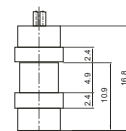
Part Number	A	B	C	D	E	F	G
R04K-9PI/PIG	19.6	14.3	7.6	8.3	9.9	4.7	6.8
R04K-15PI/PIG	23.5	18.2	7.6	12.3	13.8	4.7	6.8
R04K-21PI/PIG	27.4	22	7.6	16	17.6	4.7	6.8
R04K-25PI/PIG	29.8	24.5	7.6	18.6	20.2	4.7	6.8
R04K-31PI/PIG	33.6	28.3	7.6	22.4	24	4.7	6.8
R04K-37PI/PIG	37.4	32.2	7.6	26.3	27.8	4.7	6.8
R04K-51PI/PIG	36.4	30.86	8.7	25	26.6	5.8	7.9
R04K-66PI/PIG	42.9	37.3	8.7	31.4	33	5.8	7.9
R04K-74PI/PIG	38.8	33.5	9.7	27.5	29.1	6.8	9.1
R04K-100PI/PIG	54.7	45.7	9.7	35	36.6	6.8	9.1
R04K-9RH/RHG	19.6	14.3	7.6	9.8	9.9	6.1	6.8
R04K-15RH/RHG	23.5	18.2	7.6	13.7	13.8	6.1	6.8
R04K-21RH/RHG	27.4	22	7.6	17.4	17.6	6.1	6.8
R04K-25RH/RHG	29.8	24.5	7.6	20	20.2	6.1	6.8
R04K-31RH/RHG	33.6	28.3	7.6	23.8	24	6.1	6.8
R04K-37RH/RHG	37.4	32.2	7.6	27.7	27.8	6.1	6.8
R04K-51RH/RHG	36.4	30.86	8.7	26.5	26.6	7.2	7.9
R04K-66RH/RHG	42.9	37.3	8.7	32.9	33	7.2	7.9
R04K-74RH/RHG	38.8	33.5	9.7	29	29.1	8.3	9.1
R04K-100RH/RHG	54.7	45.7	9.7	36.6	36.65	8.2	9.1

Remark: All dimensions are in mm.

Outline Dimensions After Mating (Without Cable Clamp)



The Main View



The Left View