Miniature Circular Connectors Specifications

R03 series / R05 series / R27 series / R29 series / PRC05 series / PRC07 series

■ Part Numbering System

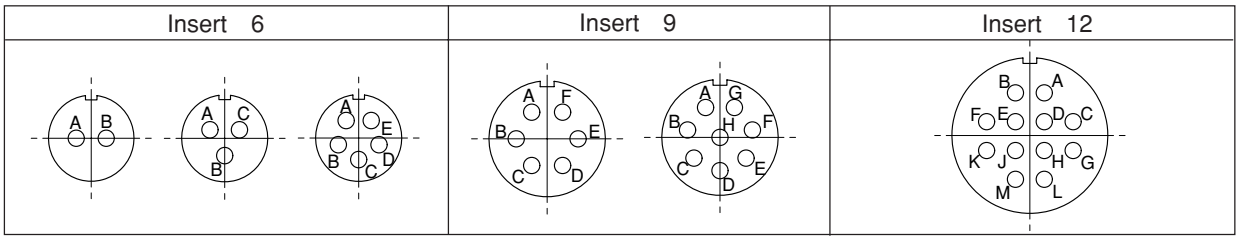
R 0 3 - P B 5 M

- Contact Style
  - M : Male
  - F : Female
- Number of Pins
- Connector Configuration
  - PB : Plug (Normal Clamp Type)
  - P : Plug (Screw Clamp Type)
  - JB : Jack (Normal Clamp Type)
  - J : Jack (Screw Clamp Type)
  - RB : Flange Mount Receptacle
  - R : Bulkhead Mount Receptacle
- Series
  - R03
  - R05
  - R27
  - R29
  - PRC05
  - PRC07

■ Electrical Specifications

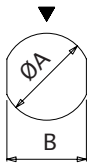
Series	R03, R05, PRC05						R27, R29, PR07	
Insert Size	6			9		12	6	9
Number of Contacts	2	3	5	6	8	12	8	12
Withstanding Voltage (V RMS)	900	900	500	900	700	900	300	
Voltage Rating (V RMS)	300	300	150	300	200	300	100	
Current Rating (A)	2							
Applicable Wire Size	AWG#24 (0.2mm² Max.)						AWG#26 (0.1mm² Max.)	
Contact Resistance	8mΩ min.						10mΩ min.	
Insulation Resistance	DC500V 1000MΩ min.						DC100V 1000MΩ min.	

■ Insert Arrangement



* Drawings above are ones viewed from the rear side of pin insulators. (pin contacts)

■ Mounting Hole Dimensions

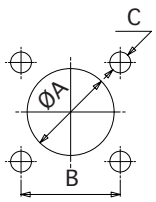


Style 1

Bulkhead Mount Receptacle

Insert Size	Style	ϕA	B
6	1	9.2	8.4
9		12.2	11.2
12		16.2	14.7

* R27, R29 and PRC07 are not available in insert size 12.



Style 2

Flange Mount Receptacle

Insert Size	Style	ϕA	B	C
6	2	9.2	10.5	ϕ2.2
9		12.2	13.0	ϕ2.2
12		16.2	17.0	ϕ2.2

* R27, R29 and PRC07 are not available in insert size 12.

Miniature Circular Connectors

R03 series / R27 series

- R03 series are small circular connectors with threads on locking. They are subminiature in size and are suited for a variety of electronic equipment.
- A wide variety of molded cable assemblies are available for your requirement.
- R27 series based on R03 series feature high density and miniaturization.

■ Specifications

Series	R05	R27
Connections	Screw Coupling	
Termination	Solder	
Temperature and Humidity	-25°C to +85°C 85% Max.	
Number of Pins	2, 3, 5, 6, 8, 12	8, 12
Shell Material / Finish	Brass and Zinc Alloy / Nickel	
Contact Material / Finish	Copper Alloy / Gold over Nickel	
Corrosion Resistance	Salt Spray 5% 48H	

* See page 28 as for Electrical Specifications.



Plug / Normal Clamp Type
R03-PB5M



Jack / Normal Clamp Type
R03-JB5F



Flange Mount Receptacle
R03-RB5F



Cable Assemblies



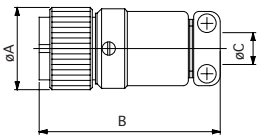
Plug / Screw Clamp Type
R03-P5M



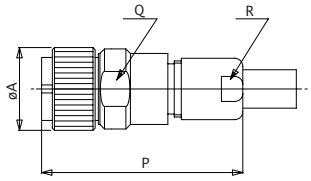
Jack / Screw Clamp Type
R03-J5F



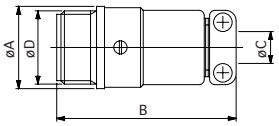
Bulkhead Mount Receptacle
R03-R5F



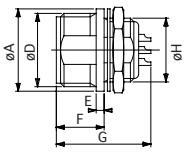
Plug / Normal Clamp Type



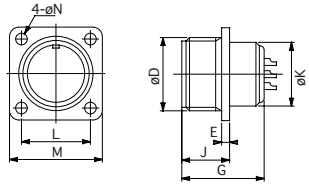
Plug / Screw Clamp Type



Jack / Normal Clamp Type



Bulkhead Mount Receptacle



Flange Mount Receptacle

■ Configuration

Series	Insert size	No. of Pins	Dimensions (mm)															
			A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
R03	6	2, 3, 5	12.0	32.0	5.2	10.5 P=0.75	1.5	9.0	18.0	9.0 P=0.5	9.5	10.5	10.5	15.0	2.2	35.0	10.5	9.5
	9	6, 8	15.5	34.0	6.2	M14 P=1	1.5	9.0	18.0	12.0 P=0.8	9.5	10.5	13.0	17.5	2.2	37.0	13.5	10.5
	12	12	20.0	39.0	10.5	M18 P=1	1.5	9.0	18.0	M16 P=1	9.5	10.5	17.0	22.5	2.8	37.0	13.5	10.5
R27	6	8	12.0	32.0	5.2	10.5 P=0.75	1.5	9.0	18.0	9.0 P=0.5	9.5	10.5	10.5	15.0	2.2	35.0	10.5	9.5
	9	12	15.5	34.0	6.2	M14 P=1	1.5	9.0	18.0	12.0 P=0.8	9.5	10.5	13.0	17.5	2.2	37.0	13.5	10.5