

MIL-DTL-83513 Micro D-Sub Connectors R04A Series Crimp Contact Type



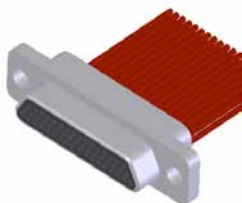
Brief Introduction

- Micro-D connectors
- Twist pin contact, high density interconnection
- Metal shell, plated nickel or cadmium
- Crimp contact type
- The sectional area of cable: 0.1mm~0.15mm, 0.07mm
- Meet MIL-DTL-83513

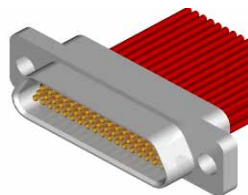
Specification

- Environment temperature: $-55\text{ }^{\circ}\text{C} \sim 125\text{ }^{\circ}\text{C}$
- Vibration: 10Hz~2000Hz, 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

Product stereogram

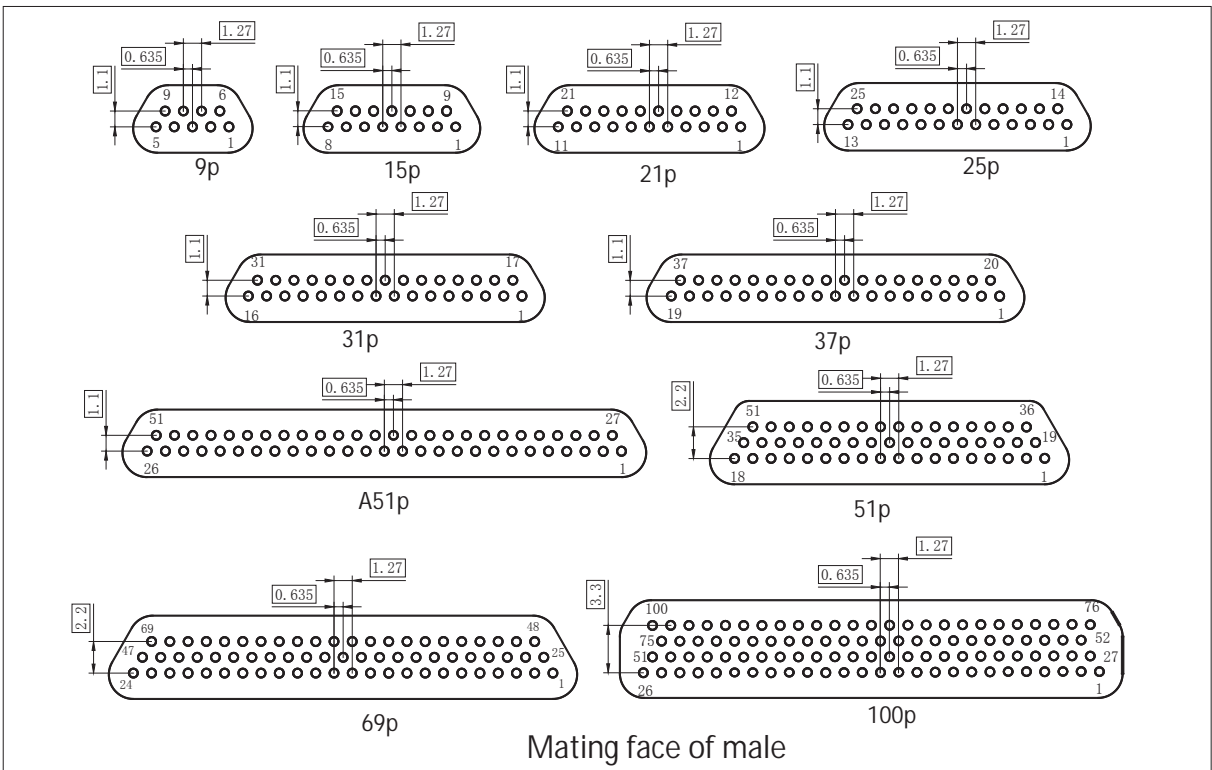


Plug



Receptacle

Contact arrangements

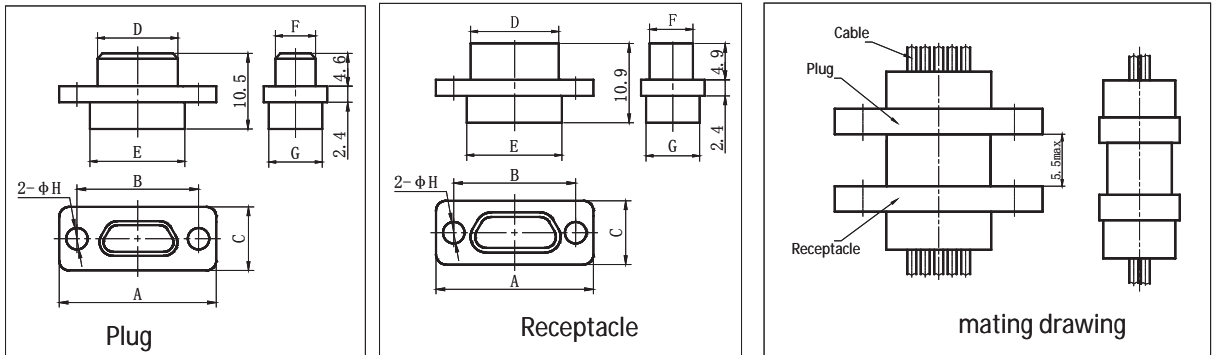


How to order

Sample part number:	R04A	-31	PI	B01	AA	(Remark)
Series:	R04A-Micro D connectors for MIL-DTL-83513					
Contact number:	9,15,21,25,31,37,A51,51,69,100pins					
Contact type:	PI-pin in plug RH-socket in receptacle					
Locking hardware:	blank-without B01-locking hardware, please see page4 to page8					
Backshell:	blank-without AA-AA style backshell, please see page9 to page11.					
Cable detail:	Please fill the cale size including the length, AWG etc.					

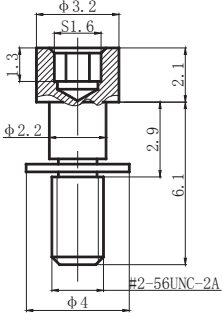
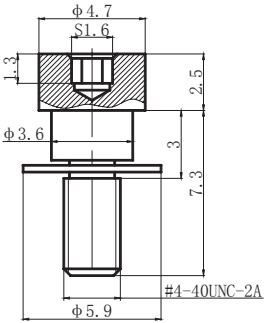
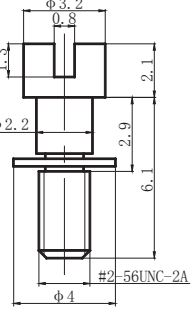
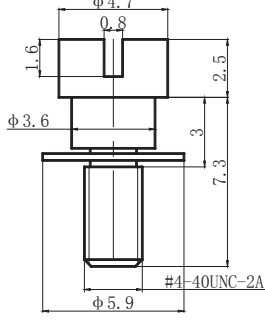
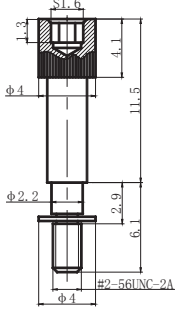
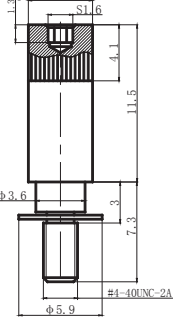
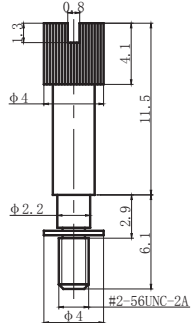
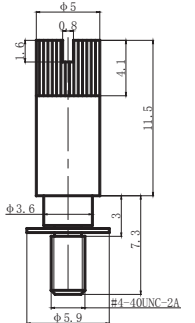
R04A series crimp type connectors

Outline Dimension



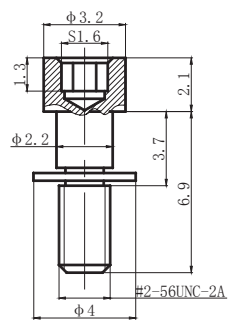
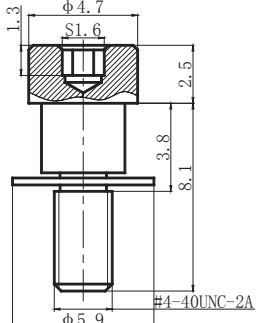
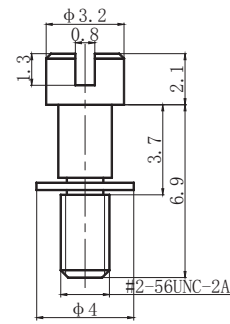
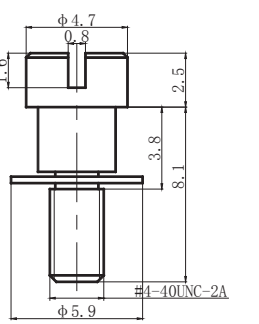
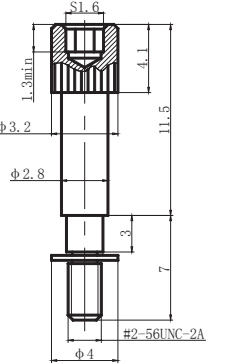
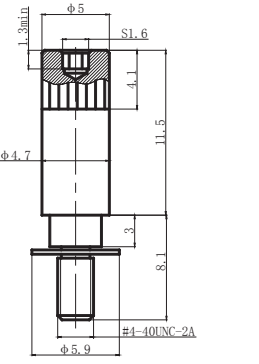
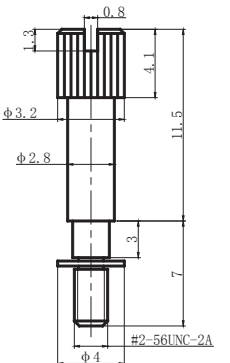
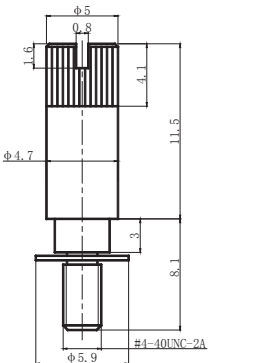
Contact Nos	Outline dimension(in mm)							
	A	B	C	D	E	F	G	H
9PI	19.6	14.3	7.6	8.4	9.9	4.7	6.8	2.31
15PI	23.5	18.2	7.6	12.3	13.8	4.7	6.8	2.31
21PI	27.3	22	7.6	16.1	17.6	4.7	6.8	2.31
25PI	29.8	24.5	7.6	18.6	20.2	4.7	6.8	2.31
31PI	33.6	28.3	7.6	22.4	24	4.7	6.8	2.31
37PI	37.4	32.1	7.6	26.2	27.8	4.7	6.8	2.31
A51PI	46.3	41	7.6	35	36.7	4.7	6.8	2.31
51PI	36.2	30.9	8.7	25	26.6	5.8	7.9	2.31
69PI	43.8	38.5	8.7	32.6	34.2	5.8	7.9	2.31
100PI	54.7	45.7	9.7	35.1	36.6	6.8	9.1	3.7
9RH	19.6	14.3	7.6	9.9	9.9	6.1	6.8	2.31
15RH	23.5	18.2	7.6	13.7	13.8	6.1	6.8	2.31
21RH	27.3	22	7.6	17.5	17.6	6.1	6.8	2.31
25RH	29.8	24.5	7.6	20.1	20.2	6.1	6.8	2.31
31RH	33.6	28.3	7.6	23.9	24	6.1	6.8	2.31
37RH	37.4	32.1	7.6	27.7	27.8	6.1	6.8	2.31
A51RH	46.3	41	7.6	36.5	36.7	6.1	6.8	2.31
51RH	36.2	30.9	8.7	26.5	26.6	7.2	7.9	2.31
69RH	43.8	38.5	8.7	34.1	34.2	7.2	7.9	2.31
100RH	54.7	45.7	9.7	36.6	36.6	8.3	9.1	3.7

The mating locking hardware

Code	Feature	Outline dimension	
		for 9~69pins	for 100pins
B01	1. Removable hardware. 2. Short jackscrew with a retainer ring. 3. Hex socket head		
B02	1. Removable hardware. 2. Short jackscrew with a retainer ring. 3. Slot head		
B03	1. Removable hardware. 2. Long jackscrew with a retainer ring. 3. Hex socket head		
B04	1. Removable hardware. 2. Long jackscrew with a retainer ring. 3. Slot head		

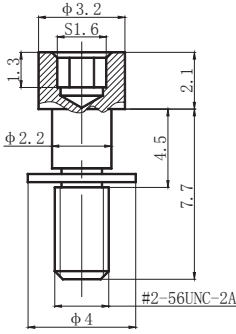
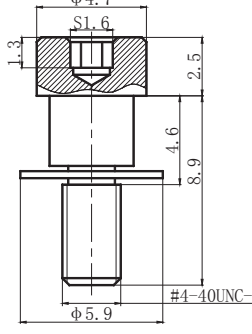
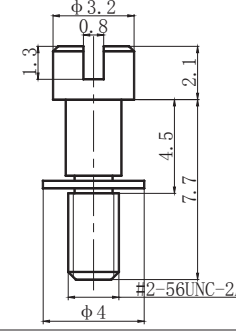
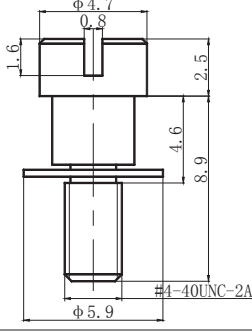
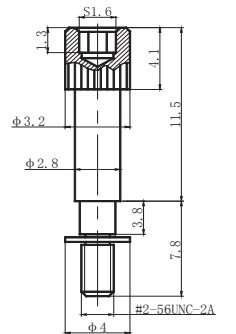
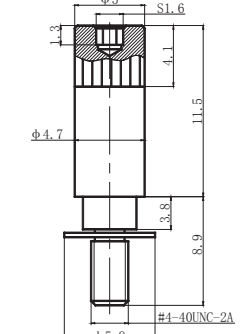
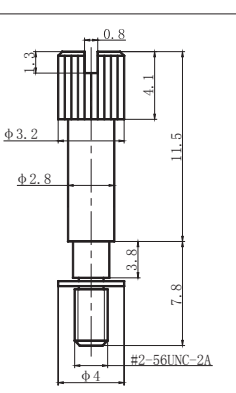
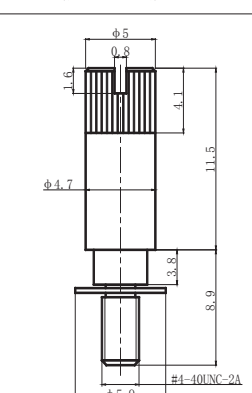
Note: all dimensions are in mm.

The mating locking hardware

Code	Feature	Outline dimension	
		for 9~69pins	for 100pins
B05	<ol style="list-style-type: none"> 1. Removable hardware. 2. Short jackscrew with a retainer ring. 3. Hex socket head 4. Used for connetors with AA, AB, AC, AD AG type backshell 		
B06	<ol style="list-style-type: none"> 1. Removable hardware. 2. Short jackscrew with a retainer ring. 3. Slot head 4. Used for connetors with AA, AB, AC, AD AG type backshell 		
B07	<ol style="list-style-type: none"> 1. Removable hardware. 2. Long jackscrew with a retainer ring. 3. Hex socket head 4. Used for connetors with AA, AB, AC, AD AG type backshell 		
B08	<ol style="list-style-type: none"> 1. Removable hardware. 2. Long jackscrew with a retainer ring. 3. Slot head 4. Used for connetors with AA, AB, AC, AD AG type backshell 		

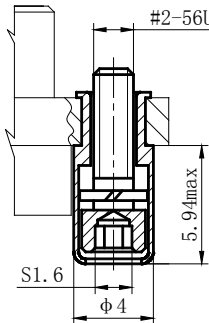
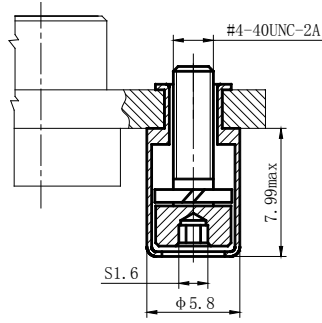
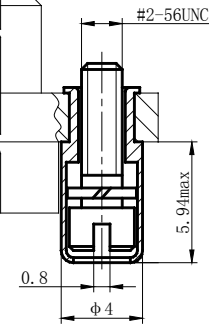
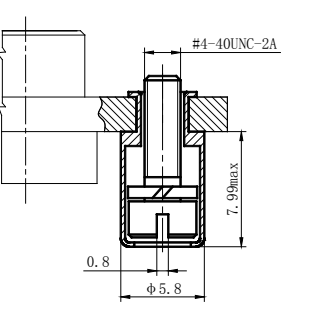
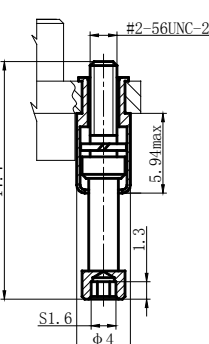
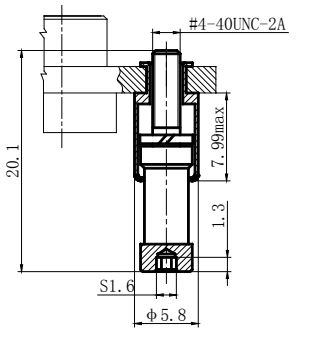
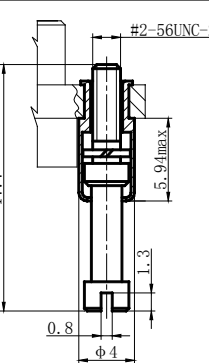
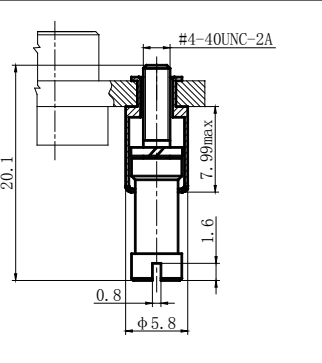
Note: all dimensions are in mm.

The mating locking hardware

Code	Feature	Outline dimension	
		for 9~69pins	for 100pins
B10	<ol style="list-style-type: none"> 1. Removable hardware. 2. Short jackscrew with a retainer ring. 3. Hex socket head 4. Used for connetors with AH, AJ type backshell. 		
B11	<ol style="list-style-type: none"> 1. Removable hardware. 2. Short jackscrew with a retainer ring. 3. Slot head 4. Used for connetors with AH, AJ type backshell. 		
B12	<ol style="list-style-type: none"> 1. Removable hardware. 2. Long jackscrew with a retainer ring. 3. Hex socket head 4. Used for connetors with AH, AJ type backshell. 		
B13	<ol style="list-style-type: none"> 1. Removable hardware. 2. Long jackscrew with a retainer ring. 3. Slot head 4. Used for connetors with AH, AJ type backshell. 		

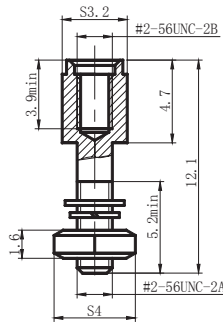
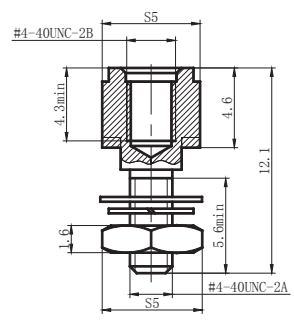
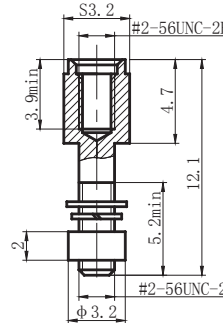
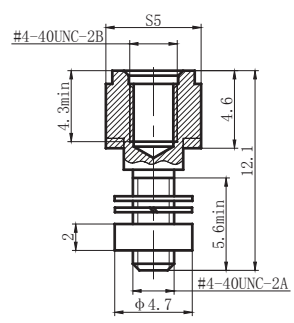
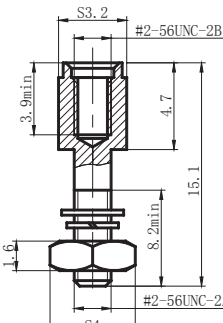
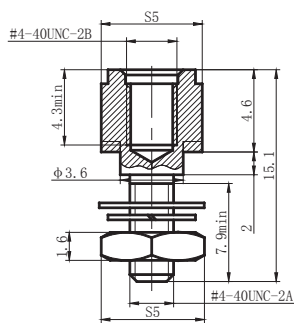
Note: all dimensions are in mm.

The mating locking hardware

Code	Feature	Outline dimension	
		for 9~69pins	for 100pins
S01	<ol style="list-style-type: none"> 1. Non removable hardware. 2. Short jackscrew with a retainer sleeve. 3. Hex socket head 		
S02	<ol style="list-style-type: none"> 1. Non removable hardware. 2. Short jackscrew with a retainer sleeve. 3. Slot socket head 		
S03	<ol style="list-style-type: none"> 1. Non removable hardware. 2. Long jackscrew with a retainer sleeve. 3. Hex socket head 		
S04	<ol style="list-style-type: none"> 1. Non removable hardware. 2. Long jackscrew with a retainer sleeve. 3. Slot socket head 		

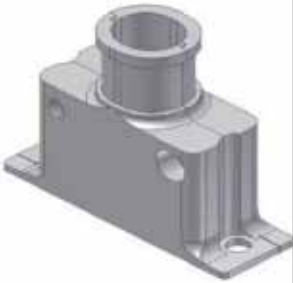
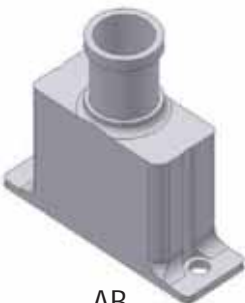

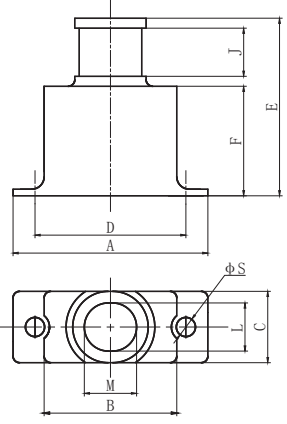
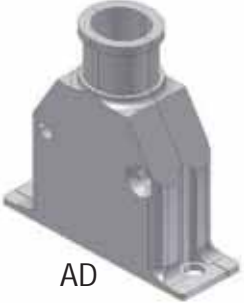
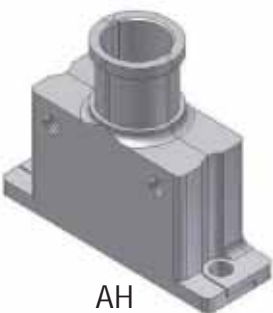
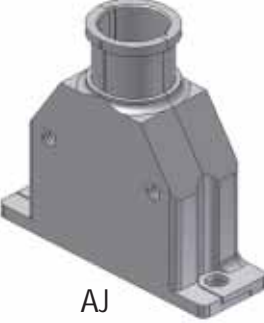

Note: all dimensions are in mm.

The mating locking hardware

Code	Feature	Outline dimension	
		for 9~69pins	for 100pins
N01	1. Hex head jackpost. 2. Suitable for front panel mounting. 3. The thickness of panel is not more than 2mm.		
N06	1. Hex head jackpost. 2. Used for connectors with backshell.		
N07	1. Hex head jackpost. 2. Used for front panel mounting. 3. The thickness of panel is not more than 5mm.		

Note: all dimensions are in mm.

Backshell

Stereogram & feature			Outline dimension
 <p>AA</p> <p>AA style: two-piece, standard type</p>	 <p>AB</p> <p>AB style: one-piece, standard type</p>	 <p>AC</p> <p>AC style: one-piece, wide entry.</p>	
 <p>AD</p> <p>AD style: two-piece, elongated type</p>	 <p>AH</p> <p>AH style: two-piece, non-skid type</p>	 <p>AJ</p> <p>AJ style: two-piece, non-skid and elongated type</p>	
 <p>AG</p> <p>AG style: one-piece, standard type with 90° entry.</p>			

Notes: all dimensions are in mm.

Outline dimension of backshell

Part No.	Outline dimension(in mm)									
	A	B	C	D	E	F	J	φS	L	M
R04A-9-AA	19.6	12.1	8.7	14.3	21.4	13.2	5.8	2.31	-	4.7
R04A-15-AA	23.5	16	8.7	18.2	21.4	13.2	5.8	2.31	-	5.8
R04A-21-AA	27.3	19.8	8.7	22	21.4	13.2	5.8	2.31	-	6.5
R04A-25-AA	29.8	22.3	8.7	24.5	21.4	13.2	5.8	2.31	6.6	7.9
R04A-31-AA	33.6	26.1	8.7	28.3	21.4	13.2	5.8	2.31	6.6	8.4
R04A-37-AA	37.4	29.9	8.7	32.1	21.4	13.2	5.8	2.31	6.6	9.5
R04A-A51-AA	46.3	38.8	8.7	41	21.4	13.2	5.8	2.31	6.6	13.1
R04A-51-AA	36.2	28.7	9.7	30.9	23.7	15.5	5.8	2.31	7.5	11.9
R04A-69-AA	43.8	36.3	9.7	38.5	23.7	15.5	5.8	2.31	7.5	15.7
R04A-100-AA	54.7	38.8	11	45.7	24.2	16	5.8	3.7	8.7	17.5
R04A-9-AB	19.6	11.2	8.7	14.3	21.4	13.2	5.8	2.31	-	4.7
R04A-15-AB	23.5	15	8.7	18.2	21.4	13.2	5.8	2.31	-	5.8
R04A-21-AB	27.3	18.8	8.7	22	21.4	13.2	5.8	2.31	-	6.5
R04A-25-AB	29.8	21.4	8.7	24.5	21.4	13.2	5.8	2.31	6.7	7.8
R04A-31-AB	33.6	25.2	8.7	28.3	21.4	13.2	5.8	2.31	6.7	8.3
R04A-37-AB	37.4	29	8.7	32.1	21.4	13.2	5.8	2.31	6.7	9.5
R04A-A51-AB	46.3	37.9	8.7	41	21.4	13.2	5.8	2.31	6.7	13
R04A-51-AB	36.2	27.8	9.7	30.9	23.7	15.5	5.8	2.31	7.5	11.9
R04A-69-AB	43.8	35.4	9.7	38.5	23.7	15.5	5.8	2.31	7.5	15.7
R04A-100-AB	54.7	38.7	11	45.7	24.2	16	5.8	3.7	8.7	17.4
R04A-9-AC	19.6	11.2	8.7	14.3	21.4	13.2	5.8	2.31	6.7	7.9
R04A-15-AC	23.5	15	8.7	18.2	21.4	13.2	5.8	2.31	6.7	11.6
R04A-21-AC	27.3	18.8	8.7	22	21.4	13.2	5.8	2.31	6.7	15.4
R04A-25-AC	29.8	21.4	8.7	24.5	21.4	13.2	5.8	2.31	6.7	18
R04A-31-AC	33.6	25.2	8.7	28.3	21.4	13.2	5.8	2.31	6.7	21.8
R04A-37-AC	37.4	29	8.7	32.1	21.4	13.2	5.8	2.31	6.7	25.6
R04A-A51-AC	46.3	37.9	8.7	41	21.4	13.2	5.8	2.31	6.7	26.2
R04A-51-AC	36.2	27.8	9.7	30.9	23.7	15.5	5.8	2.31	7.5	23.4
R04A-69-AC	43.8	35.4	9.7	38.5	23.7	15.5	5.8	2.31	7.5	29.4
R04A-100-AC	54.7	38.7	11	45.7	24.2	16	5.8	3.7	8.7	34.1
R04A-9-AD	19.6	12.1	8.7	14.3	29.4	21.2	5.8	2.31	-	4.7
R04A-15-AD	23.5	16	8.7	18.2	29.4	21.2	5.8	2.31	-	5.8
R04A-21-AD	27.3	19.8	8.7	22	29.4	21.2	5.8	2.31	-	6.5
R04A-25-AD	29.8	22.3	8.7	24.5	29.4	21.2	5.8	2.31	6.6	7.9
R04A-31-AD	33.6	26.1	8.7	28.3	29.4	21.2	5.8	2.31	6.6	8.4
R04A-37-AD	37.4	29.9	8.7	32.1	29.4	21.2	5.8	2.31	6.6	9.5
R04A-A51-AD	46.3	38.8	8.7	41	29.4	21.2	5.8	2.31	6.6	13.1
R04A-51-AD	36.2	28.7	9.7	30.9	31.7	23.5	5.8	2.31	7.5	11.9
R04A-69-AD	43.8	36.3	9.7	38.5	31.7	23.5	5.8	2.31	7.5	15.7
R04A-100-AD	54.7	38.8	11	45.7	32.2	24	5.8	3.7	8.7	17.5
R04A-9-AH	19.6	11.2	8.7	14.3	21.4	13.2	5.8	2.31	-	4.7
R04A-15-AH	23.5	15	8.7	18.2	21.4	13.2	5.8	2.31	-	5.8
R04A-21-AH	27.3	18.8	8.7	22	21.4	13.2	5.8	2.31	-	6.5
R04A-25-AH	29.8	21.4	8.7	24.5	21.4	13.2	5.8	2.31	6.7	7.8

Outline dimension of backshell

Part No.	Outline dimension(in mm)									
	A	B	C	D	E	F	J	φS	L	M
R04A-31-AH	33.6	25.2	8.7	28.3	21.4	13.2	5.8	2.31	6.7	8.3
R04A-37-AH	37.4	29	8.7	32.1	21.4	13.2	5.8	2.31	6.7	9.5
R04A-A51-AH	46.3	37.9	8.7	41	21.4	13.2	5.8	2.31	6.7	13
R04A-51-AH	36.2	27.8	9.7	30.9	23.7	15.5	5.8	2.31	7.5	11.9
R04A-69-AH	43.8	35.4	9.7	38.5	23.7	15.5	5.8	2.31	7.5	15.7
R04A-100-AH	54.7	38.7	11	45.7	24.2	16	5.8	3.7	8.7	17.4
R04A-9-AJ	19.6	12.1	8.7	14.3	29.4	21.2	5.8	2.31	-	4.7
R04A-15-AJ	23.5	16	8.7	18.2	29.4	21.2	5.8	2.31	-	5.8
R04A-21-AJ	27.3	19.8	8.7	22	29.4	21.2	5.8	2.31	-	6.5
R04A-25-AJ	29.8	22.3	8.7	24.5	29.4	21.2	5.8	2.31	6.6	7.9
R04A-31-AJ	33.6	26.1	8.7	28.3	29.4	21.2	5.8	2.31	6.6	8.4
R04A-37-AJ	37.4	29.9	8.7	32.1	29.4	21.2	5.8	2.31	6.6	9.5
R04A-A51-AJ	46.3	38.8	8.7	41	29.4	21.2	5.8	2.31	6.6	13.1
R04A-51-AJ	36.2	28.7	9.7	30.9	31.7	23.5	5.8	2.31	7.5	11.9
R04A-69-AJ	43.8	36.3	9.7	38.5	31.7	23.5	5.8	2.31	7.5	15.7
R04A-100-AJ	54.7	38.8	11	45.7	32.2	24	5.8	3.7	8.7	17.5
R04A-9-AG	19.6	11.2	8.7	14.3	17.3	19.4	-	2.31	-	4.7
R04A-15-AG	23.5	15	8.7	18.2	18.4	23.2	-	2.31	-	5.8
R04A-21-AG	27.3	18.8	8.7	22	19.1	27	-	2.31	-	6.5
R04A-25-AG	29.8	21.4	8.7	24.5	20.4	29.6	-	2.31	6.7	7.8
R04A-31-AG	33.6	25.2	8.7	28.3	20.9	33.4	-	2.31	6.7	8.3
R04A-37-AG	37.4	29	8.7	32.1	22.1	37.2	-	2.31	6.7	9.5
R04A-A51-AG	46.3	37.9	8.7	41	25.6	46.1	-	2.31	6.7	13
R04A-51-AG	36.2	27.8	9.7	30.9	24.5	36	-	2.31	7.5	11.9
R04A-69-AG	43.8	35.4	9.7	38.5	28.3	43.6	-	2.31	7.5	15.7
R04A-100-AG	54.7	38.7	11	45.7	30	46.9	-	3.7	8.7	17.4