

# Reverse Bayonet Coupling Connectors

## DCA Series

## DDK Ltd.

**RoHS Compliant**

### OUTLINE

DCA series is a bayonet coupling connector which utilizes MIL-DTL-5015 insert arrangements and is compatible with VG95234. The inserts are made of the synthetic rubber and can cope with various environments required by the industrial applications. DCA "F" style and "R" style are designed to prevent dust, oil and water from intruding into the connectors.

The DCA series is suitable for applications such as servo motors, machine tools and factory automation equipment.



Conforming Standard  
MIL-DTL-5015

Waterproof  
IP67  
IP55

Lock Type  
Bayonet

### FEATURES

- ◆ Quick positive bayonet coupling.
- ◆ Audible, tactile and visual indication of full coupling.
- ◆ IP67 when mated and used with suitable accessories, grommet or a waterproof backshell.
- ◆ Contacts available in both crimp and solder terminations,
- ◆ High shock and vibration capabilities.
- ◆ Operating temperature range: -55°C to 125°C with Neoprene insert.
- ◆ Intermateable with existing VG95234 connectors.

### SPECIFICATIONS

#### Rated Voltage

Service Rating	DC	AC(r.m.s)
INST	250V	200V
A	700V	500V
D	1250V	900V
E	1750V	1250V

#### Rated Current

Contact Size	Contact Size	Max. Value per Contact(A)
# 16	φ 1.5	13A
# 12	φ 2.4	23A
# 8	φ 3.6	46A
# 4	φ 5.7	80A
# 0	φ 9.1	150A

### APPLICABLE CABLE

Contact Size	AWG	Nominal Sectional Area	Maximum Conductor Dia.
#16	#16 - #22	1.25mm <sup>2</sup>	1.6mm
#12	#12 - #14	3.50mm <sup>2</sup>	2.5mm
#8	#8 - #10	8.00mm <sup>2</sup>	4.5mm
#4	#4 - #6	22.00mm <sup>2</sup>	7.0mm
#0	#0 - #2	50.00mm <sup>2</sup>	11.0mm

### MATERIAL / FINISH



Item	Material / Finish
Contact	Copper Alloy / Gold Plating or Silver Plating
Insert	Ethylene Propylene Rubber / Black
Shell	Aluminum Alloy / Zinc Plating , Black Trivalent Chromium Treatment

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▶ Insert Arrangement List

Number of Contact	1 Contact			
Insert Arrangement				
Insert Number	20-2	10SL-4	12S-3	18-3
Contact Size	1-#0	2-#16	2-#16	2-#12
Service Rating	D	A	A	D

Number of Contact	3 Contact			
Insert Arrangement				
Insert Number	10SL-3	14S-7	16S-5	16-10
Contact Size	3-#16	3-#16	3-#16	3-#12
Service Rating	A	A	A	A

Number of Contact	4 Contact				
Insert Arrangement					
Insert Number	14S-2	16-9	18-10	22-22	32-17
Contact Size	4-#16	2-#12 / 2-#16	4-#12	4-#8	4-#4
Service Rating	INST.	A	A	A	D

Number of Contact	5 Contact			
Insert Arrangement				
Insert Number	14S-5	16S-8	18-11	28-5B
Contact Size	5-#16	5-#16	5-#12	2-#4 / 3-#8
Service Rating	INST.	A	A	D (A, B) A (C, D, E)

Contact Size Symbol					
	#16	#12	#8	#4	#0
Service Rating	INST	A	D	E	
Rated Voltage AC(r.m.s.)	200	500	900	1,250	
Rated Voltage DC	250	700	1,200	1,750	
Contact Size	#16	#12	#8	#4	#0
MAX Current /Contact	13	23	46	80	150

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▶ Insert Arrangement List

Number of Contact	6 Contact		7 Contact		
Insert Arrangement					
Insert Number	14S-6	36-3	16S-1	20-15	24-10
Contact Size	6-#16	3-#0/3-#12	7-#16	7-#12	7-#8
Service Rating	INST.	D	A	A	A

Number of Contact	10 Contact	11 Contact	
Insert Arrangement			
Insert Number	18-1	18-19	20-33
Contact Size	10-#16	10-#16	11-#16
Service Rating	A (B,C,F,G) INST. (Others)	A	A

Number of Contact	14 Contact	17 Contact	19 Contact	
Insert Arrangement				
Insert Number	20-27	22-19	20-29	22-14
Contact Size	14-#16	14-#16	17-#16	19-#16
Service Rating	A	A	A	A

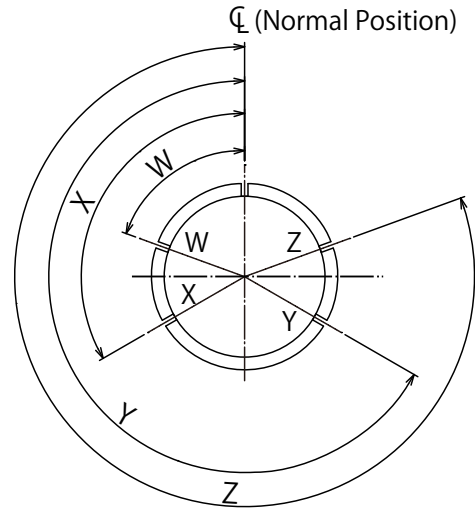
Number of Contact	24 Contact	37 Contact	48 Contact
Insert Arrangement			
Insert Number	24-28	28-21	36-10
Contact Size	24-#16	37-#16	48-#16
Service Rating	INST.	A	A

Contact Size Symbol	● #16	⊕ #12	⊙ #8	○ #4	◐ #0
Service Rating	INST	A	D	E	
Rated Voltage AC(r.m.s.)	200	500	900	1,250	
Rated Voltage DC	250	700	1,200	1,750	
Contact Size	#16	#12	#8	#4	#0
MAX Current /Contact	13	23	46	80	150

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▶ Alternate Insert Position

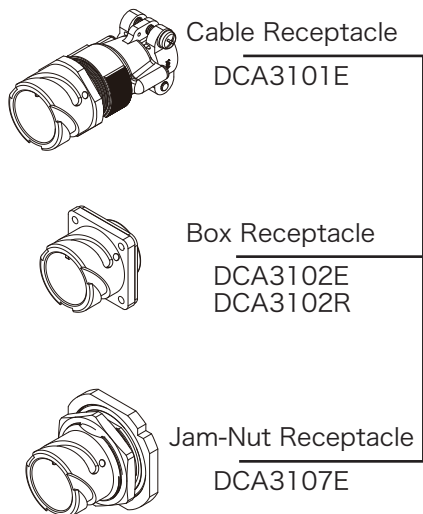
Insert No.	Key / Keyway No.			
	W	X	Y	Z
10SL-3	—	—	—	—
10SL-4	—	—	—	—
12S-3	70°	145°	215°	290°
14S-2	—	120°	240°	—
14S-5	—	110°	—	—
14S-6	—	—	—	—
14S-7	90°	180°	270°	—
16S-1	80	—	—	280°
16S-5	70°	145°	215°	290°
16S-8	—	170°	265°	—
16-9	35°	110°	250°	325°
16-10	90°	180°	270°	—
18-1	70°	145°	215°	290°
18-3	35°	110°	250°	325°
18-10	—	120°	240°	—
18-11	—	170°	265°	—
18-19	—	120°	240°	—
20-2	—	—	—	—
20-15	80°	—	—	280°
20-27	35°	110°	250°	325°
20-29	80°	—	—	280°
20-33	—	—	—	—
22-14	80°	110°	250°	280°
22-19	80°	110°	250°	280°
22-22	—	110°	250°	—
24-10	80°	—	—	280°
24-28	80°	110°	250°	280°
28-5B	—	—	—	—
28-21	80°	110°	250°	280°
32-17	45°	110°	250°	—
36-3	70°	145°	215°	290°
36-10	80°	125°	235°	280°



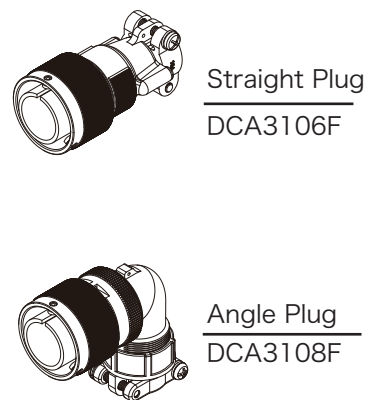
Front face of Pin Insert or Rear face of socket insert

▶ Connector Combination

Receptacle Connector



Plug Connector



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 Insert Specifications

Shell Size	Insert Number	Contact Size					Service Rating
		#0	#4	#8	#12	#16	
10SL	10SL-3					3	A
	10SL-4					2	A
12S	12S-3					2	A
14S	14S-2					4	INST
	14S-5					5	INST
	14S-6					6	INST
	14S-7					3	A
16S	16S-1					7	A
	16S-5					3	A
	16S-8					5	A
16	16-9				2	2	A
	16-10				3		A
18	18-1					10	A(B,C,F,G)/INST(Other)
	18-3				2		D
	18-10				4		A
	18-11				5		A
	18-19					10	A
20	20-2	1					D
	20-15				7		A
	20-27					14	A
	20-29					17	A
	20-33					11	A
22	22-14					19	A
	22-19					14	A
	22-22			4			A
24	24-10			7			A
	24-28					24	INST
28	28-5B		2	3			A(C,D,E)/D(A,B)
	28-21					37	A
32	32-17		4				D
36	36-3	3			3		D
	36-10					48	A

Note : 10SL-3 and 10SL-4 arrangement available only with pin contacts in receptacle and socket contacts in plug ( Example : DCA3102R10SL-3P-D, DCA3102R10SL-4P-D, DCA3106F10SL-3S-D, DCA3106F10SL-4S-D)

▶ DCA Part Numbering System

**DCA3106F20-29SW**   **-D-** **BSS-1**

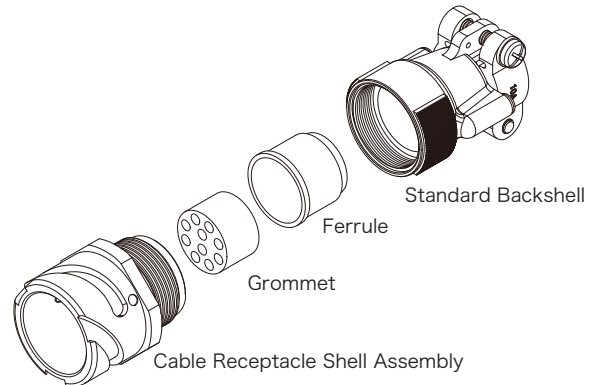
①      ②      ③      ④      ⑤      ⑥      ⑦      ⑧      ⑨      ⑩      ⑪

① Connector Series	DCA : Reverse Bayonet Style
② Connector Style	3101 : Cable connecting receptacle ( in-line receptacle ) 3102 : Box mounting receptacle 3106 : Straight plug 3107 : Jam nut receptacle 3108 : 90 degree angle plug
③ Gasket	E : Environmental with rubber insert F : Environmental with rubber insert and gasket R : Environmental with rubber insert and gasket ( 3102 Only )
④ Shell Size	10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36
⑤ Insert Arrangement	Refer to page 2 ~ 3
⑥ Contact Configuration (style)	P : Pin contacts S : Socket contacts PC : Crimp pin contacts SC : Crimp socket contacts
⑦ Alternate Insert Position	Omit : Normal position "W", "X", "Y", "Z" : Refer to page 4
⑧ Contact Plating Finish	Omit : Silver Plating G : Gold Plating
⑨ Finish	<b>D : Trivalent Chromium Treatment (Black)</b>
⑩ Backshell Style	BSN : With non - waterproof straight backshell BSS : With waterproof straight backshell BSL : With waterproof Long straight backshell
⑪ Applicable Cable Diameter	0 : With non - waterproof cable clamp 1 ~ 8 : With waterproof cable clamp

▶ Cable Receptacle Connector

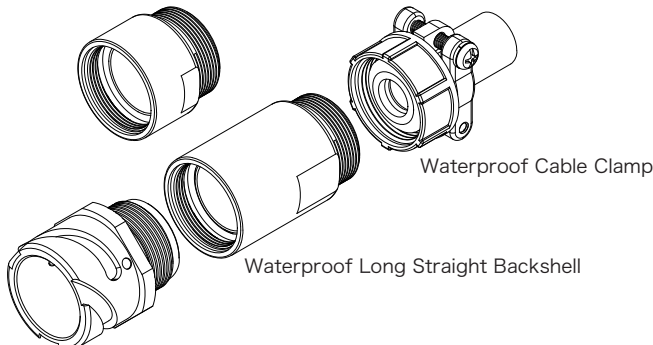
DCA3101E □□□□ - □□□□ -D- □□□ - □

**DCA3101E** □□□□ - □□□□ - **D**

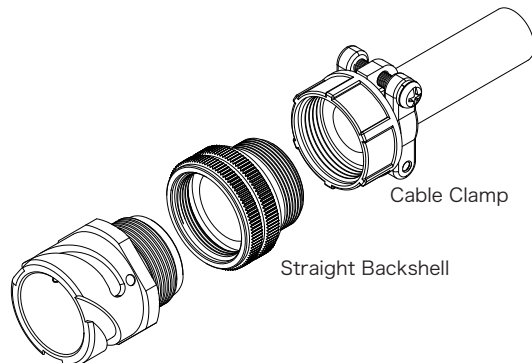


**DCA3101E** □□□□ - □□□□ -D- BS □ - □

Waterproof Straight Backshell



**DCA3101E** □□□□ - □□□□ -D- BSN - 0

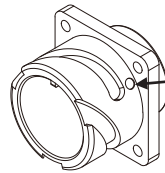


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▶ Box Mounting Receptacle Connector

DCA3102E □□□□ - □□□□ -D  
DCA3102R □□□□ - □□□□ -D ( With Gasket )

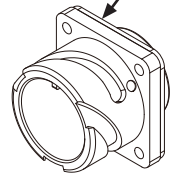
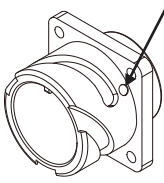
DCA3102E □□□□ - □□□□ -D



Marking for locking end indication

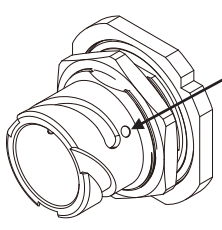
With Gasket

DCA3102R □□□□ - □□□□ -D



▶ Jam-Nut Receptacle Connector

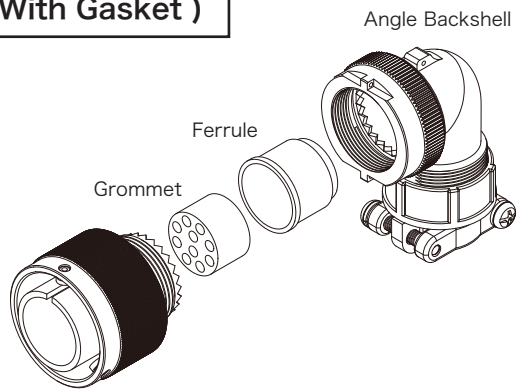
DCA3107E □□□□ - □□□□ -D



Marking for locking end indication

▶ Angle Backshell

DCA3108F □□□□ - □□□□ -D ( With Gasket )

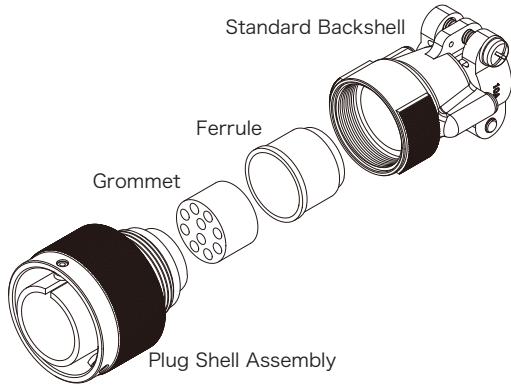


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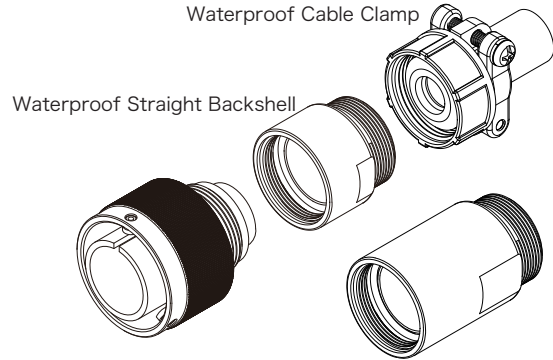
▶ Straight Plug Connector

DCA3106F □□□□ - □□□□ -D ( With Gasket )

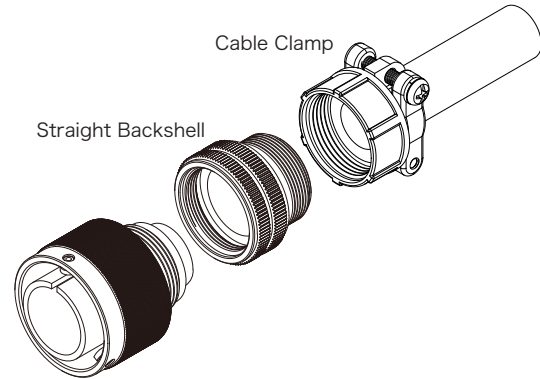
DCA3106F □□□□ - □□□□ -D



DCA3106F □□□□ - □□□□ -D- BS □ - □

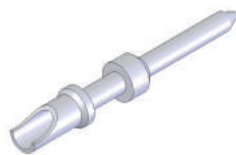


DCA3106F □□□□ - □□□□ -D- BSN - 0



▶ Contact

Solder Type



Pin Contact  
DMSE- # □□ P □



Socket Contact  
DMSE- # □□ S □

Crimp Type



Pin Contact  
DMSE- # □□ P-C □



Socket Contact  
DMSE- # □□ S-C □

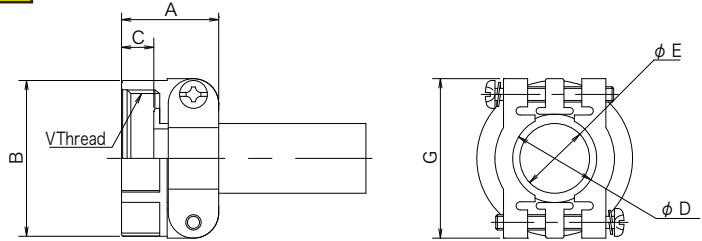
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▶ Applicable Clamp

With non-waterproof Cable Clamp

D/MS3057- □□ A

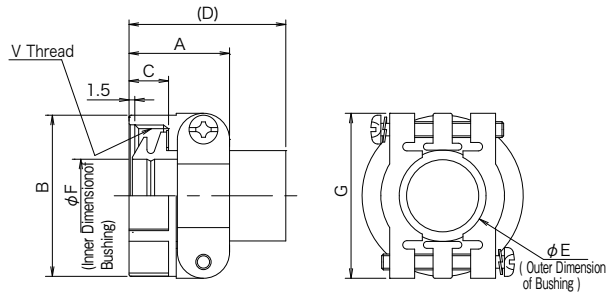


※ Applicable Cable Diameter  
0 : With non-waterproof cable clamp

※ ⑩	Part Number	Shell Size	A±0.7	B±0.7	C	D	E	G±0.7	V	Bushing Part Number
0	D/MS3057-4A	10SL,12S	20.6	20.6	10.3	7.9	5.6	22.2	5/8-24UNEF-2B	AN3420-4
0	D/MS3057-6A	14S	22.2	24.6	10.3	11.2	7.9	27.0	3/4-20UNEF-2B	AN3420-6
0	D/MS3057-8A	16S,16	23.8	27.8	10.3	14.3	11.1	29.4	7/8-20UNEF-2B	AN3420-8
0	D/MS3057-10A	18	23.8	30.1	10.3	15.9	14.3	31.7	1-20UNEF-2B	AN3420-10
0	D/MS3057-12A	20,22	23.8	35.0	10.3	19.0	15.9	37.3	1 3/16-18UNEF-2B	AN3420-12
0	D/MS3057-16A	24,28	26.2	42.1	10.3	23.8	19.1	42.9	1 7/16-18UNEF-2B	AN3420-16
0	D/MS3057-20A	32	27.8	51.6	11.9	31.7	23.8	51.6	1 3/4-18UNS-2B	AN3420-20
0	D/MS3057-24A	36	29.4	56.4	13.5	34.9	31.8	58.0	2-18UNS-2B	AN3420-24

With waterproof Cable Clamp

CE3057- □□ A- □ -D



※ Applicable Cable Diameter  
1 ~ 8 : With waterproof cable clamp

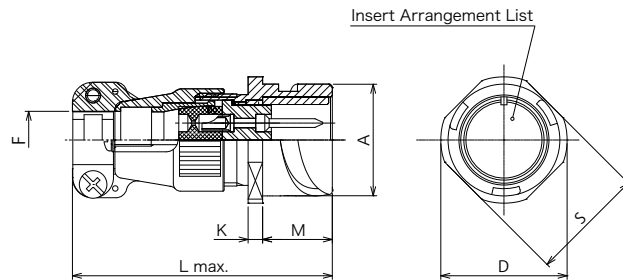
※ ⑩	Part Number	Shell Size	A	B	C	(D)	E	F	G	V	Bushing Part Number	Applicable Cable
1	CE3057-4A-1-D	10SL,12S	20.62	20.6	10.31	(41.3)	8.0	5.6	22.2	5/8-24UNEF-2B	CE3420-4-1	φ 3.6 ~ φ 5.6
1	CE3057-6A-1-D	14S	22.20	24.6	10.31	(41.3)	10.8	9	27	3/4-20UNEF-2B	CE3420-6-1	φ 7.0 ~ φ 9.0
1	CE3057-8A-1-D	16S,16	23.83	27.8	10.31	(41.3)	14.0	12	29.4	7/8-20UNEF-2B	CE3420-8-1	φ 10.0 ~ φ 12.0
2	CE3057-8A-2-D							10.5			CE3420-8-2	φ 8.5 ~ 10.5
1	CE3057-10A-1-D	18	23.83	30.1	10.31	(41.3)	15.8	14.1	31.7	1-20UNEF-2B	CE3420-10-1	φ 10.5 ~ φ 14.1
2	CE3057-10A-2-D							11			CE3420-10-2	φ 8.5 ~ φ 11.0
3	CE3057-10A-3-D							8.7			CE3420-10-3	φ 6.5 ~ φ 8.7
1	CE3057-12A-1-D	20	23.83	35	10.31	(41.3)	19.0	16	37.3	1 3/16-18UNEF-2B	CE3420-12-1	φ 12.5 ~ φ 16.0
2	CE3057-12A-2-D							13			CE3420-12-2	φ 9.5 ~ φ 13.0
3	CE3057-12A-3-D							10			CE3420-12-3	φ 6.8 ~ φ 10.0
7	CE3057-12A-7-D							17			CE3420-12-7	φ 14.5 ~ φ 17.0
1	CE3057-16A-1-D	24	26.19	42.1	10.31	(41.3)	23.8	19.1	42.9	1 7/16-18UNEF-2B	CE3420-16-1	φ 15.0 ~ φ 19.1
2	CE3057-16A-2-D							15.5			CE3420-16-2	φ 13.0 ~ φ 15.5
4	CE3057-16A-4-D							21.5			J-06814 CZY005-GB-3	φ 19.1 ~ φ 21.5
6	CE3057-16A-6-D							20			CE3420-16-6	φ 18.5 ~ φ 20.0
7	CE3057-16A-7-D							13.5			CE3420-16-7	φ 11.5 ~ φ 13.5
8	CE3057-16A-8-D							12.5		J-07369 CZY005-GB-6(MO)	φ 10.5 ~ φ 12.5	
1	CE3057-20A-1-D	32	27.79	51.6	11.91	(43)	32.0	23.8	51.6	1 3/4-18UNS-2B	CE3420-20-1	φ 22.0 ~ φ 23.8
2	CE3057-20A-2-D							26.6			CE3420-20-2	φ 24.0 ~ φ 26.6
3	CE3057-20A-3-D							22.5			CZY005-GB-5	φ 21.0 ~ φ 22.5
1	CE3057-24A-1-D	36	29.4	56.4	13.5	(45.8)	34.6	32.5	58.0	2-18UNS-2B	CE3420-24-1	φ 30.0 ~ φ 32.5
2	CE3057-24A-2-D							29.6			CE3420-24-2	φ 27.5 ~ φ 29.6
3	CE3057-24A-3-D							31			AN3420-24(D264)	φ 29.0 ~ φ 31.0

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## ▶ Cable Receptacle Connector

DCA3101E18 - □□ P □□ -D

① ② ③ ④ ⑤ ⑥ ⑦ ⑧



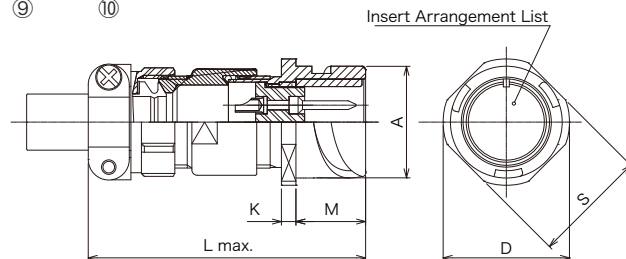
① Connector Series	3101 : Cable Receptacle Connector
② Gasket	E : Less Gasket
③ Shell Size	10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36
④ Insert Arrangement	Refer to page 2 ~ 3
⑤ Contact Type	P : Pin contacts S : Socket contacts PC : Crimp pin contacts SC : Crimp socket contacts
⑥ Alternate Insert Position	Omit : Normal position "W", "X", "Y", "Z" : Refer to page 4
⑦ Contact Plating Finish	Omit : Silver Plating G : Gold Plating
⑧ Finish	D : Trivalent Chromium Treatment (Black)

Shell Size	$\phi A$	K $\pm 0.5$	L	M	$\phi D$	S $\pm 0.5$	$\phi F \pm 0.2$
10SL	18.2	2.8	53.9	14.4	25.4	20.6	8.0
12S	21.4	3.2	52.9	14.4	27.8	23.6	8.3
14S	24.6	3.2	55.4	14.4	29.8	25.4	11.1
16S	27.4	3.2	59.7	14.4	32.3	28.6	14.2
16	27.4	4.0	69.2	19.2	32.3	28.6	14.2
18	30.8	4.0	71.6	19.2	34.8	31.7	15.8
20	34.2	4.0	71.8	19.2	37.8	34.9	19.1
22	37.4	4.0	72.8	19.2	41.1	38.1	19.1
24	40.9	4.0	78.5	20.8	44.6	41.3	24.0
28	46.7	4.0	78.8	20.8	50.9	47.6	24.0
32	53.4	4.0	78.9	22.4	57.1	54.0	32.0
36	59.6	4.0	75.4	22.4	63.6	60.6	38.0

## ▶ Cable Receptacle Connector

DCA3101E18- □□ P □□ -D-BSS- □

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩



◎ Cable clamp (CE3057- □□ A- □ -D) is available.

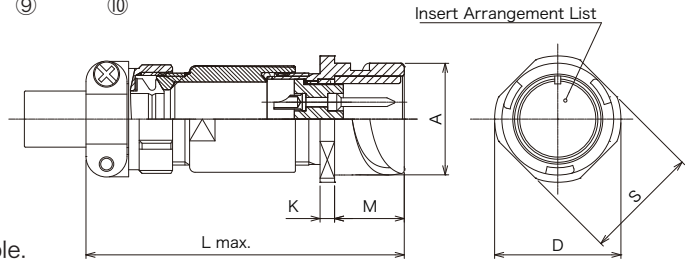
① Connector Series	3101 : Cable Receptacle
② Gasket	E : Less Gasket
③ Shell Size	10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36
④ Insert Arrangement	Refer to page 2 ~ 3
⑤ Contact Type	P : Pin contacts S : Socket contacts PC : Crimp pin contacts SC : Crimp socket contacts
⑥ Alternate Insert Position	Omit : Normal position "W", "X", "Y", "Z" : Refer to page 4
⑦ Contact Plating Finish	Omit : Silver Plating G : Gold Plating
⑧ Finish	D : Trivalent Chromium Treatment (Black)
⑨ Backshell	BSS : Waterproof Straight Backshell
⑩ Applicable Cable Diameter	1 ~ 8 : With waterproof cable clamp

Shell Size	$\phi A$	K $\pm 0.5$	L	M	$\phi D$	S $\pm 0.5$
10SL	18.2	2.8	59.6	14.4	25.4	20.6
12S	21.4	3.2	58.0	14.4	27.8	23.6
14S	24.6	3.2	65.7	14.4	29.8	25.4
16S	27.4	3.2	66.4	14.4	32.3	28.6
16	27.4	4.0	75.9	19.2	32.3	28.6
18	30.8	4.0	76.4	19.2	34.8	31.7
20	34.2	4.0	78.5	19.2	37.8	34.9
22	37.4	4.0	84.1	19.2	41.1	38.1
24	40.9	4.0	91.1	20.8	44.6	41.3
28	46.7	4.0	98.5	20.8	50.9	47.6
32	53.4	4.0	107.8	22.4	57.1	54.0
36	59.6	4.0	109.8	22.4	63.6	60.6

◎ Specifications and/or dimensions in this catalog are subject to change without notice.  
Please verify the latest specifications with our drawings.

▶ Cable Receptacle Connector

DCA3101E18 - □□ P □□ -D-BSL- □  
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩



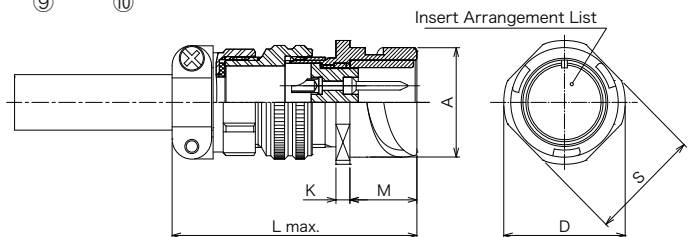
◎ Cable clamp (CE3057- □□ A- □ -D) is available.

① Connector Series	3101 : Cable Receptacle
② Gasket	E : Less Gasket
③ Shell Size	10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36
④ Insert Arrangement	Refer to page 2 ~ 3
⑤ Contact Type	P : Pin contacts S : Socket contacts PC : Crimp pin contacts SC : Crimp socket contacts
⑥ Alternate Insert Position	Omit : Normal position "W", "X", "Y", "Z" : Refer to page 4
⑦ Contact Plating Finish	Omit : Silver Plating G : Gold Plating
⑧ Finish	D : Trivalent Chromium Treatment (Black)
⑨ Backshell	BSL : With waterproof Long straight backshell
⑩ Applicable Cable Diameter	1 ~ 8 : With waterproof cable clamp

Shell Size	φ A	K±0.5	L	M	φ D	S±0.5
10SL	18.2	2.8	79.5	14.4	25.4	20.6
12S	21.4	3.2	79.0	14.4	27.8	23.6
14S	24.6	3.2	85.7	14.4	29.8	25.4
16S	27.4	3.2	86.4	14.4	32.3	28.6
16	27.4	4.0	95.9	19.2	32.3	28.6
18	30.8	4.0	96.4	19.2	34.8	31.7
20	34.2	4.0	98.5	19.2	37.8	34.9
22	37.4	4.0	104.1	19.2	41.1	38.1
24	40.9	4.0	111.1	20.8	44.6	41.3
28	46.7	4.0	118.5	20.8	50.9	47.6
32	53.4	4.0	127.3	22.4	57.1	54.0
36	59.6	4.0	129.8	22.4	63.6	60.6

▶ Cable Receptacle Connector

DCA3101E18 - □□ P □□ -D-BSN-0  
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩



◎ Cable clamp (D/MS3057- □□ A) is available.

① Connector Series	3101 : Cable Receptacle
② Gasket	E : Less Gasket
③ Shell Size	10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36
④ Insert Arrangement	Refer to page 2 ~ 3
⑤ Contact Type	P : Pin contacts S : Socket contacts PC : Crimp pin contacts SC : Crimp socket contacts
⑥ Alternate Insert Position	Omit : Normal position "W", "X", "Y", "Z" : Refer to page 4
⑦ Contact Plating Finish	Omit : Silver Plating G : Gold Plating
⑧ Finish	D : Trivalent Chromium Treatment (Black)
⑨ Backshell	BSN : With non - waterproof straight backshell
⑩ Applicable Cable Diameter	0 : With non - waterproof cable clamp

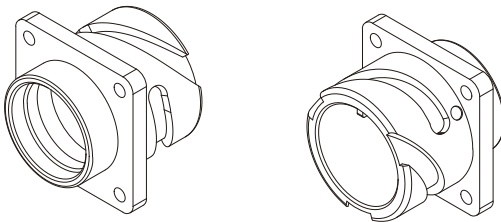
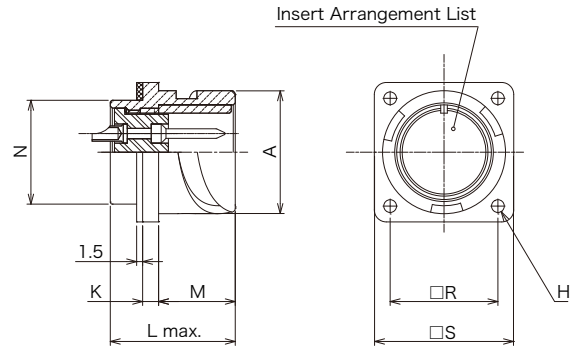
Shell Size	φ A	K±0.5	L	M	φ D	S±0.5
10SL	18.2	2.8	54.9	14.4	25.4	20.6
12S	21.4	3.2	56.4	14.4	27.8	23.6
14S	24.6	3.2	56.9	14.4	29.8	25.4
16S	27.4	3.2	59.6	14.4	32.3	28.6
16	27.4	4.0	69.1	19.2	32.3	28.6
18	30.8	4.0	70.2	19.2	34.8	31.7
20	34.2	4.0	74.2	19.2	37.8	34.9
22	37.4	4.0	73.6	19.2	41.1	38.1
24	40.9	4.0	76.8	20.8	44.6	41.3
28	46.7	4.0	79.9	20.8	50.9	47.6
32	53.4	4.0	79.1	22.4	57.1	54.0
36	59.6	4.0	79.7	22.4	63.6	60.6

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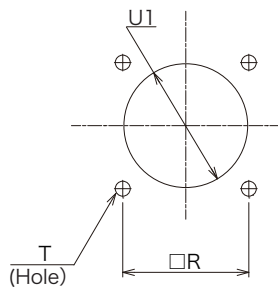
▶ Box Receptacle Connector

DCA3102R18- □□ P □□ -D  
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Connector Series	3102 : Box Receptacle
② Gasket	E : Less Gasket R : With Gasket
③ Shell Size	10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36
④ Insert Arrangement	Refer to page 2 ~ 3
⑤ Contact Type	P : Pin contacts S : Socket contacts PC : Crimp pin contacts SC : Crimp socket contacts
⑥ Alternate Insert Position	Omit : Normal position "W", "X", "Y", "Z" : Refer to page 4
⑦ Contact Plating Finish	Omit : Silver Plating G : Gold Plating
⑧ Finish	D : Trivalent Chromium Treatment (Black)



Shell Size	φ A	K±0.5	L	M	φ N±0.5	R±0.2	S±0.5	φ H
10SL	18.2	2.8	25.0	14.4	14.5	18.26	25.4	3.0
12S	21.4	3.2	26.0	14.4	15.8	20.62	27.8	3.3
14S	24.6	3.2	26.0	14.4	19.0	23.01	30.18	3.3
16S	27.4	3.2	25.5	14.4	22.0	24.61	32.54	3.3
16	27.4	4.0	31.3	19.2	22.0	24.61	32.54	3.3
18	30.8	4.0	31.3	19.2	26.0	26.94	34.93	3.3
20	34.2	4.0	32.1	19.2	29.0	29.36	38.1	3.3
22	37.4	4.0	35.0	19.2	32.0	31.75	41.28	3.3
24	40.9	4.0	35.0	20.8	35.3	34.93	45.0	3.8
28	46.7	4.0	36.0	20.8	42.0	39.67	50.8	3.8
32	53.4	4.0	39.0	22.4	47.3	44.45	57.15	4.5
36	59.6	4.0	39.5	22.4	53.3	49.23	63.5	4.5



Panel Mounting Dimension (reference)  
Front Mounting

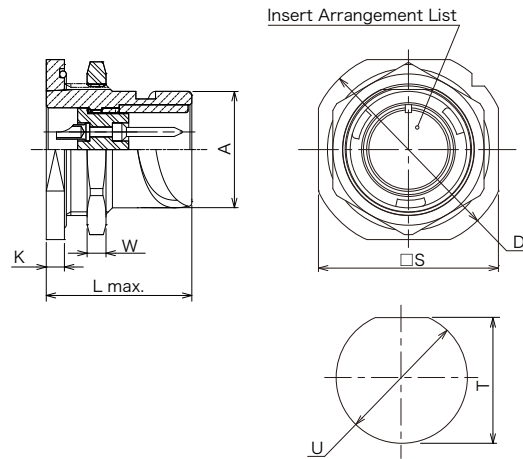
Shell Size	R±0.12	φ U1	φ T
10SL	18.26	15.5	3.05
12S	20.62	16.8	3.05
14S	23.01	20.0	3.05
16S	24.61	23.0	3.05
16	24.61	22.9	3.05
18	26.94	27.0	3.05
20	29.36	30.0	3.05
22	31.75	33.0	3.05
24	34.93	36.3	3.75
28	39.67	43.0	3.75
32	44.45	48.3	4.40
36	49.23	54.3	4.40

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▶ Jam-Nut Receptacle Connector

DCA3107E18- □ □ P □ □ -D  
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Connector Series	3107E : Jam-Nut Receptacle
② Gasket	E : Less Gasket
③ Shell Size	10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36
④ Insert Arrangement	Refer to page 2 ~ 3
⑤ Contact Type	P : Pin contacts S : Socket contacts PC : Crimp pin contacts SC : Crimp socket contacts
⑥ Alternate Insert Position	Omit : Normal position "W", "X", "Y", "Z" : Refer to page 4
⑦ Contact Plating Finish	Omit : Silver Plating G : Gold Plating
⑧ Finish	D : Trivalent Chromium Treatment (Black)

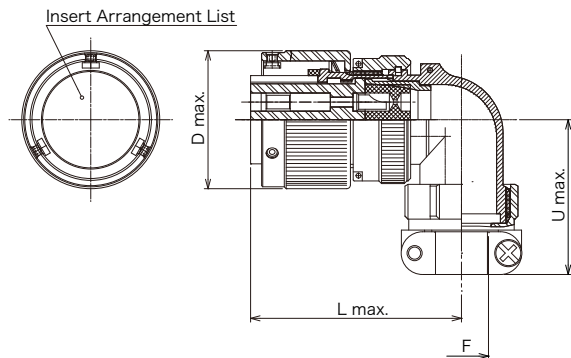


Shell Size	φ A	K±0.5	L	W	φ D	S±0.5	T	φ U	Panel thickness(mm)
10SL	18.2	4.0	28.5	4.0	35.0	31.8	20.9	22.7	3.5 ~ 7.0
12S	21.4	3.2	29.2	4.0	38.1	34.9	24.1	25.7	3.5 ~ 8.0
14S	24.6	4.8	31.6	4.0	47.6	41.3	27.2	28.8	5.5 ~ 9.0
16S	27.4	4.8	31.6	4.0	50.9	44.4	30.4	32.0	5.5 ~ 9.0
16	27.4	4.8	36.9	4.0	50.9	44.4	30.4	32.0	3.0 ~ 5.0
18	30.8	4.8	38.5	5.0	52.4	47.6	33.6	35.1	3.0 ~ 6.5
20	34.2	4.8	38.5	5.0	55.5	50.8	36.8	38.2	3.0 ~ 6.5
22	37.4	4.8	38.5	5.0	63.6	54.2	39.9	42.0	3.5 ~ 6.5
24	40.9	4.8	38.5	5.0	63.6	57.2	43.1	44.7	3.0 ~ 6.5
28	46.7	5.6	40.8	5.0	69.7	63.5	49.2	51.1	4.0 ~ 8.0
32	53.4	5.6	40.8	5.0	78.0	69.8	55.7	57.4	4.0 ~ 8.0
36	59.6	5.6	40.8	5.0	90.0	76.2	62.0	63.8	4.0 ~ 8.0

▶ Angle Plug Connector

DCA3108F18- □ □ P □ □ -D  
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

① Connector Series	3108 : Angle Plug
② Gasket	F : With Gasket
③ Shell Size	10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36
④ Insert Arrangement	Refer to page 2 ~ 3
⑤ Contact Type	P : Pin contacts S : Socket contacts PC : Crimp pin contacts SC : Crimp socket contacts
⑥ Alternate Insert Position	Omit : Normal position "W", "X", "Y", "Z" : Refer to page 4
⑦ Contact Plating Finish	Omit : Silver Plating G : Gold Plating
⑧ Finish	D : Trivalent Chromium Treatment (Black)

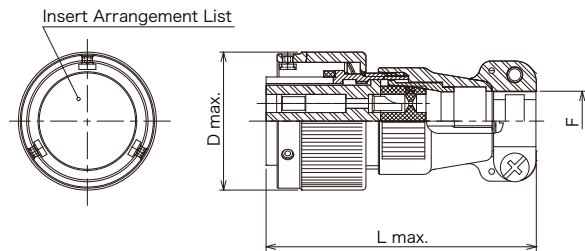


Shell Size	φ D	L	U	F±0.2
10SL	22.8	44.7	32.2	8.0
12S	25.6	43.4	32.2	8.3
14S	29.2	46.5	34.8	11.1
16S	32.0	50.9	42.0	14.2
16	32.0	56.2	42.0	14.2
18	36.5	55.8	41.0	15.8
20	39.9	58.8	42.3	19.1
22	43.1	63.0	45.9	19.1
24	46.6	64.9	48.7	24.0
28	53.4	66.4	51.2	24.0
32	59.7	73.9	62.3	32.0
36	66.0	72.8	66.1	38.0

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## ▶ Straight Plug Connector

DCA3106F18-□□P□□-D  
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧

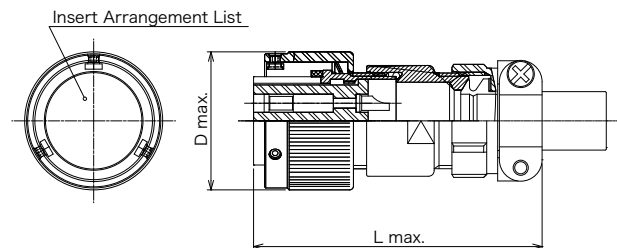


① Connector Series	3106 : Straight Plug
② Gasket	F : With Gasket
③ Shell Size	10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36
④ Insert Arrangement	Refer to page 2 ~ 3
⑤ Contact Type	P : Pin contacts S : Socket contacts PC : Crimp pin contacts SC : Crimp socket contacts
⑥ Alternate Insert Position	Omit : Normal position "W", "X", "Y", "Z" : Refer to page 4
⑦ Contact Plating Finish	Omit : Silver Plating G : Gold Plating
⑧ Finish	D : Trivalent Chromium Treatment (Black)

Shell Size	$\phi$ D	L	F $\pm$ 0.2
10SL	22.8	54.4	8.0
12S	25.6	52.9	8.3
14S	29.2	55.3	11.1
16S	32.0	62.6	14.2
16	32.0	69.1	14.2
18	36.5	71.5	15.8
20	39.9	71.7	19.1
22	43.1	72.8	19.1
24	46.6	78.6	24.0
28	53.4	78.5	24.0
32	59.7	77.5	32.0
36	66.0	75.4	38.0

## ▶ Straight Plug Connector

DCA3106F18-□□P□□-D-BSS-□  
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩



◎ Cable clamp (CE3057-□□A-□-D) is available.

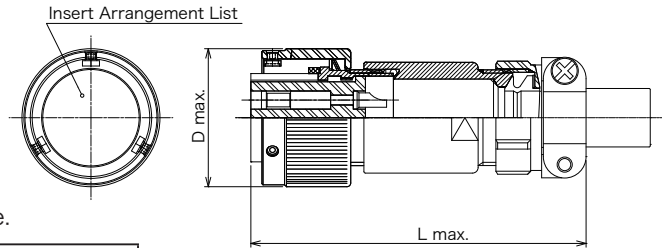
① Connector Series	3106 : Straight Plug
② Gasket	F : With Gasket
③ Shell Size	10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36
④ Insert Arrangement	Refer to page 2 ~ 3
⑤ Contact Type	P : Pin contacts S : Socket contacts PC : Crimp pin contacts SC : Crimp socket contacts
⑥ Alternate Insert Position	Omit : Normal position "W", "X", "Y", "Z" : Refer to page 4
⑦ Contact Plating Finish	Omit : Silver Plating G : Gold Plating
⑧ Finish	D : Trivalent Chromium Treatment (Black)
⑨ Backshell	BSS : Waterproof Straight Backshell
⑩ Applicable Cable Diameter	1 ~ 8 : With waterproof cable clamp

Shell Size	$\phi$ D	L
10SL	22.8	60.0
12S	25.6	59.0
14S	29.2	65.7
16S	32.0	69.3
16	32.0	75.8
18	36.5	76.3
20	39.9	78.4
22	43.1	84.3
24	46.6	93.4
28	53.4	98.2
32	59.7	105.9
36	66.0	109.8

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▶ Straight Plug Connector

DCA3106F18- □□ P □□ -D-BSL- □  
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩



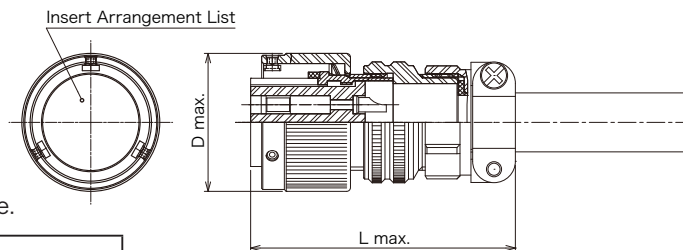
◎ Cable clamp (CE3057- □□ A- □ -D) is available.

① Connector Series	3106 : Straight Plug
② Gasket	F : With Gasket
③ Shell Size	10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36
④ Insert Arrangement	Refer to page 2 ~ 3
⑤ Contact Type	P : Pin contacts S : Socket contacts PC : Crimp pin contacts SC : Crimp socket contacts
⑥ Alternate Insert Position	Omit : Normal position "W", "X", "Y", "Z" : Refer to page 4
⑦ Contact Plating Finish	Omit : Silver Plating G : Gold Plating
⑧ Finish	D : Trivalent Chromium Treatment (Black)
⑨ Backshell	BSL : With waterproof Long straight backshell
⑩ Applicable Cable Diameter	1 ~ 8 : With waterproof cable clamp

Shell Size	φ D	L
10SL	22.8	80.0
12S	25.6	79.0
14S	29.2	85.7
16S	32.0	89.3
16	32.0	95.8
18	36.5	96.3
20	39.9	98.4
22	43.1	104.1
24	46.6	113.4
28	53.4	118.1
32	59.7	125.9
36	66.0	129.8

▶ Straight Plug Connector

DCA3106F18- □□ P □□ -D-BSN-0  
 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩



◎ Cable clamp (D/MS3057- □□ A) is available.

① Connector Series	3106 : Straight Plug
② Gasket	F : With Gasket
③ Shell Size	10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36
④ Insert Arrangement	Refer to page 2 ~ 3
⑤ Contact Type	P : Pin contacts S : Socket contacts PC : Crimp pin contacts SC : Crimp socket contacts
⑥ Alternate Insert Position	Omit : Normal position "W", "X", "Y", "Z" : Refer to page 4
⑦ Contact Plating Finish	Omit : Silver Plating G : Gold Plating
⑧ Finish	D : Trivalent Chromium Treatment (Black)
⑨ Backshell	BSN : With non - waterproof straight backshell
⑩ Applicable Cable Diameter	0 : With non - waterproof cable clamp

Shell Size	φ D	L
10SL	22.8	55.4
12S	25.6	56.5
14S	29.2	56.9
16S	32.0	62.5
16	32.0	69.0
18	36.5	70.1
20	39.9	74.1
22	43.1	73.6
24	46.6	76.7
28	53.4	79.6
32	59.7	77.7
36	66.0	79.7

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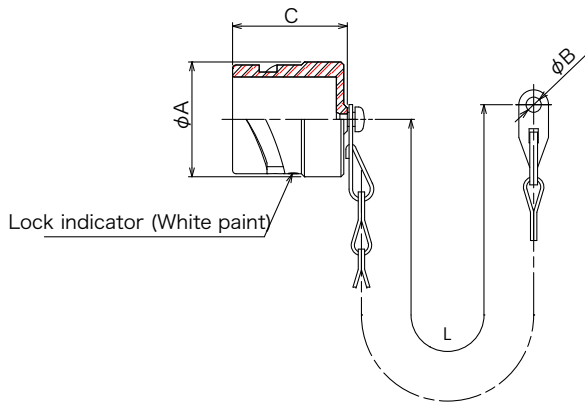
▶ Waterproof Metal Cap & Chain for Plug

DCA PC- □□□□ -D  
 ①      ②      ③

① Connector Style	PC : Plug Cap
② Shell Size	10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36
③ Shell Color (RoHS compliant)	D : Trivalent Chromium Treatment (Black)

**Material / Finish**

Aluminum Alloy / Zinc plating,  
 Trivalent Chromium Treatment(Black)



Shell Size	φ A±0.3	φ B <sup>+0.3</sup> <sub>0</sub>	C	L
10SL	20.2	4.3	24.5	120
12S	23.2	4.3	24.5	120
14S	26.5	4.3	24.5	120
16S	29.0	4.3	24.5	120
16	29.0	4.3	32.5	135
18	32.5	4.3	32.5	135
20	36.0	4.7	32.5	150
22	39.0	4.7	32.5	150
24	42.5	4.7	32.5	150
28	48.5	4.7	32.5	210
32	55.0	5.5	32.5	210
36	61.5	5.5	32.5	210

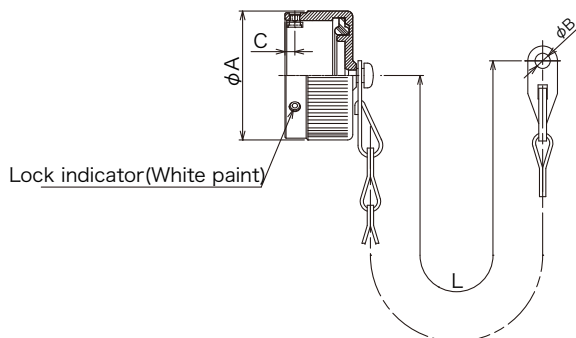
▶ Waterproof Metal Cap & Chain for Receptacle

DCA RC- □□□□ -D  
 ①      ②      ③

① Connector Style	RC : Receptacle Cap
② Shell Size	10SL, 12S, 14S, 16S, 16, 18, 20, 22, 24, 28, 32, 36
③ Shell Color(RoHS compliant)	D : Trivalent Chromium Treatment(Black)

**Material / Finish**

Aluminum Alloy / Zinc plating,  
 Trivalent Chromium Treatment(Black)

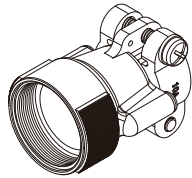


Shell Size	φ A±0.3	φ B <sup>+0.3</sup> <sub>0</sub>	C	L
10SL	22.8	4.3	2.3	110
12S	25.6	4.3	2.3	110
14S	29.2	4.3	2.3	110
16S	32.0	4.3	2.3	110
16	32.0	4.3	2.54	120
18	36.5	4.3	2.54	120
20	39.9	4.3	2.54	135
22	43.1	4.3	2.54	135
24	46.6	4.3	2.54	135
28	53.4	5.5	2.54	180
32	60.0	5.5	2.54	180
36	65.0	5.5	2.54	180

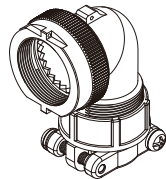
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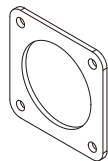
**Backshell**



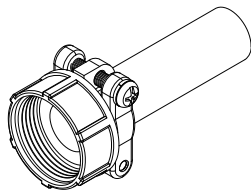
Standard Backshell  
D/MSE- □□□□ BS- □



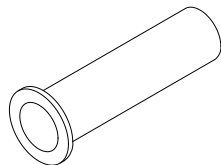
Angle Backshell  
D/MSE- □□□□ BA- □



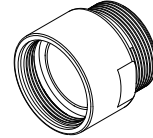
Rear Gasket of Receptacle  
DMSE- □□□□ RG



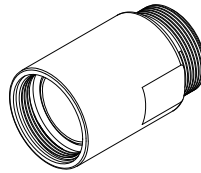
Cable Clamp  
D/MS3057- □□ A



Rubber Bushing  
AN3420- □□ A



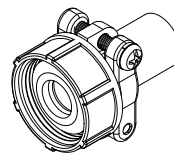
Waterproof Straight Backshell  
D/MSE- □□□□ BSS- □



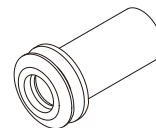
Waterproof Long Straight Backshell  
D/MSE- □□□□ BSSL- □



Straight Backshell  
D/MSE- □□□□ BSN- □



Waterproof Cable Clamp  
CE3057- □□ A- □ -D



Waterproof Rubber Bushing  
CE3420- □□ - □

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## Applicable Crimp Contacts &amp; Crimp Tool

Contact P/N	Contact Size	Applicable Wire AWG	Crimp Tool Body		TOOL			Note
			MILITARY P/N	DMC P/N	LOCATOR DDK P/N	GAGE	Semi-automatic DMC P/N	
DMSE-#12P □ -C1	#12	4mm <sup>2</sup>	M22520/1-01	AF8	357J-53229T (with stopper)	M22520/3-1 G125	WA27F	
DMSE-#12S □ -C1								
DMSE-#12P □ -C2	#12	AWG14-12	M22520/1-01	AF8				
DMSE-#12S □ -C2								
DMSE-#12P □ -C3	#12	AWG18-16	M22520/1-01	AF8				
DMSE-#12S □ -C3								
DMSE-S#16P □ -C1	#16	AWG18-16	M22520/1-01	AF8	357J-53230T (with stopper)	M22520/3-1 G125	WA27F	Note: Stopper for 7 kinds of contacts will be attached to each locator part number.
DMSE-#16P □ -C1								
DMSE-L#16P □ -C1								
DMSE-SS#16S □ -C1								
DMSE-S#16S □ -C1								
DMSE-#16S □ -C1								
DMSE-L#16S □ -C1								
DMSE-S#16P □ -C2	#16	AWG18-22	M22520/1-01	AF8				
DMSE-#16P □ -C2								
DMSE-L#16P □ -C2								
DMSE-SS#16S □ -C2								
DMSE-S#16S □ -C2								
DMSE-#16S □ -C2								
DMSE-L#16S □ -C2								
DMSE-S#16P □ -C3	#16	AWG26-22	M22520/1-01	AF8				
DMSE-#16P □ -C3								
DMSE-L#16P □ -C3								
DMSE-SS#16S □ -C3								
DMSE-S#16S □ -C3								
DMSE-#16S □ -C3								
DMSE-L#16S □ -C3								

Note : DMC stands for Daniels Manufacturing Corporation.

## Applicable Crimp Contacts &amp; Crimp Tool

Contact P/N	Contact Size	Applicable Wire AWG	DMC P/N	DMC DIE ASSEMBLY P/N	LOKATOR DDK P/N			
DMSE-#0P □ -C1	#0	AWG 0 50mm <sup>2</sup> AWG 2 (35mm <sup>2</sup> ) AWG 4 (25mm <sup>2</sup> ) 16mm <sup>2</sup>	WA23	WA23-5	357J-53244T			
DMSE-#0P □ -C2								
DMSE-#0P □ -C3								
DMSE-#0P □ -C4								
DMSE-#0P □ -C5								
DMSE-#0S □ -C1								
DMSE-#0S □ -C2								
DMSE-#0S □ -C3								
DMSE-#0S □ -C4								
DMSE-#0S □ -C5								
DMSE-L#0P □ -C1		AWG 0 50mm <sup>2</sup> AWG 2 (35mm <sup>2</sup> ) AWG 4 (25mm <sup>2</sup> )		WA23-5	357J-53245T			
DMSE-L#0P □ -C2								
DMSE-L#0P □ -C3								
DMSE-L#0P □ -C4								
DMSE-L#0P □ -C5								
DMSE-L#0S □ -C1								
DMSE-L#0S □ -C2								
DMSE-L#0S □ -C3								
DMSE-L#0S □ -C4								
DMSE-L#0S □ -C5								
DMSE-#4P □ -C1	#4	AWG 4 16mm <sup>2</sup> AWG 6 10mm <sup>2</sup>	WA23-4	357J-53246T				
DMSE-#4P □ -C2								
DMSE-#4P □ -C3								
DMSE-#4P □ -C4								
DMSE-#4S □ -C1								
DMSE-#4S □ -C2								
DMSE-#4S □ -C3								
DMSE-#4S □ -C4								
DMSE-L#4P □ -C1					AWG 4 16mm <sup>2</sup> AWG 6 10mm <sup>2</sup>	WA23-4	357J-53247T	
DMSE-L#4P □ -C2								
DMSE-L#4P □ -C3								
DMSE-L#4P □ -C4								
DMSE-L#4S □ -C1								
DMSE-L#4S □ -C2								
DMSE-L#4S □ -C3								
DMSE-L#4S □ -C4								
DMSE-#8P □ -C1		#8	10mm <sup>2</sup> AWG 8 AWG 10 AWG 14/12	WA23-2				357J-53248T
DMSE-#8P □ -C2								
DMSE-#8P □ -C3								
DMSE-#8P □ -C4								
DMSE-#8S □ -C1								
DMSE-#8S □ -C2								
DMSE-#8S □ -C3								
DMSE-#8S □ -C4								
DMSE-L#8P □ -C1	10mm <sup>2</sup> AWG 8 AWG 10 AWG 14/12				WA23-2	357J-53249T		
DMSE-L#8P □ -C2								
DMSE-L#8P □ -C3								
DMSE-L#8P □ -C4								
DMSE-L#8S □ -C1								
DMSE-L#8S □ -C2								
DMSE-L#8S □ -C3								
DMSE-L#8S □ -C4								

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