

# Amphenol

AGE-SERIES  
HIGH CURRENT LOW VOLTAGE SINGLE  
POLE CONNECTORS AGE96929



Amphenol



## Introduction

Amphenol AGE 96929 its single pole high current low voltage Reverse bayonet connectors meets the requirements of VG96929 standard. Shell design & mating dimension's based on VG9534. With insulator split in to two parts front & rear which are retained with constant spring force.

### Features

- The operating temperature ranges from -55°C to +125°C
- Current Rating 225A -950A
- Termination crimp & screw bolt type
- Cross plugging avoided with the help of keyway polarization
- Connectors are high shock & vibration resistance
- Quick positive coupling ¼ turn rotation
- Intermatable / Interchangeable with any VG96929 connectors
- Waterproof in mating condition at 1 Bar
- Available in variety of styles Plug, Receptacle ( Inline /Wall Mount / Box Mount)

### Application

- Military Vehicle
- EV Application
- Industrial Application

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1. Materials:-

Shell : Aluminium Alloy  
 Contact : Copper Alloy  
 insert : PTFE  
 "O" ring's/Gasket : Neoprene Rubber/Silicon Rubber.

2. Finish:-

Shell : Cadmium Plate Over Olive drab Finish  
 Contact : Silver Plated

3. Environmental Performances:-

Operating Temperature : -55° to +125°C  
 Corrosion Resistance : 500 Hrs

4. Mechanical Performances:-

Durability : 500 Mating Cycles  
 Contact Termination : Crimp / Bolt Termination

5. Electrical Performances:

CURRENT RATING (A) 125°C AMBIENT TEMPERATURE

Shell Size	16	18	22	28	32
Contact Size	H2	H5	H9	H15	H24
MAX. CURRENT RATING (A)	225 A	350 A	570 A	750 A	950 A
Max. Short-time load appr 0.5-1 sec (A)	750	1000	2000	3000	5000
Contact Resistance	0.6	0.3	0.15	0.1	0.7
Wire Size (mm <sup>2</sup> )	25	50	95	150	240

Insulation Resistance : 5000 Mega-ohms Min at 500VDC

- 6. Vibration:- : 200 m/s<sup>2</sup> for 10-2000 Hz
- 7. Sealing:- : Test Pressure 1 bar at 16 hour.
- 8. Air & Creepage Path's:-
  - Air Path's : 3 mm Min.
  - Creepage Path : 5 mm Min.

9. CONTACT WITHDRAWAL FORCES OF INDIVIDUAL CONTACT.

CONTACT SIZE	PIN/SOCKET SIZE	FORCES
H2	ø3.45/10.45	5 N Min.
H5	ø4.45/12.45	8 N Min.
H9	ø6.45/17.45	8 N Min.
H15	ø7.95/24.35	16 N Min.
H24	ø11.45/310.40	16 N Min.

10. CONTACT RETENSION.

CONTACT SIZE	TEST FORCE MIN.
H2	100 N
H5	120 N
H9	140 N
H15	160 N
H24	200 N

11. SHOCK.

- : Half Sine
- : 500 m/s<sup>2</sup>, 11ms;
- : Test Condition A, 9 Shock
- 3 Shock in each direction of the 3 main axis

12. THERMAL SHOCK

- : Severity 1 Highest Temp., However 155° C, 5 Cycles
- : Exposure Time 30 Min,

13. VOLTAGE

TEST VOLTAGE	1050 Vac
WORKING VOLTAGE	350 Vac
According to MIL-STD-1344	



### HOW TO ORDER

AGE96929

A1

- 18

F

N

- XX

Series Designation

Shell Style

Keyway Polarization

N - Normal

Z - 120°

Contact Type

F -Spring Contact

Z -Cylindrical Contact

Shell Size

16	18	22	28	32
H2	H5	H9	H15	H24

- A1 Receptacle with Crimp Contact  
(Threaded Flange Hole)
- A2 Receptacle with screw termination contact  
(Front mount) (Through Flange Hole)
- B1 Receptacle with Heat Shrinkable Endshell  
(Threaded Flange Hole)
- B2 Receptacle with Crimp Contact  
(Rear Panel Mount) (Through Flange Hole)
- B3 Cable Connecting Receptacle Adaptor  
for Heat Shrink Boots
- B14 Cable Connecting Receptacle  
Shielded Version
- C1 Bulkhead Receptacle  
(Threaded Flange Hole)
- C2 Bulkhead Receptacle  
(Through Flange hole)
- E Right Angle Plug Connector  
with RFI & Shielded Endshell
- F Straight Plug Connector  
with RFI & Shielded Endshell
- G Straight Plug Connector  
with Heat Shrinkable Endshell

**Modifications:**

TH : Through flange holes

TD : Threaded flange holes

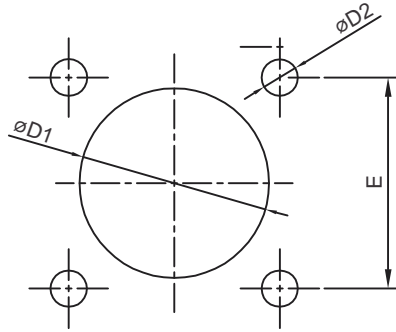
MF : Modified Flange Dimensions

BTLXX : Extra bolt length (only style A2)

For Other Finish Consult Factory

For Other Dust Cap Termination Consult Factory

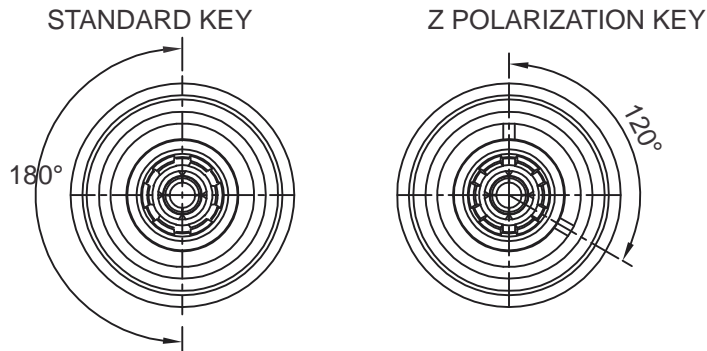
## PANEL CUT OUT



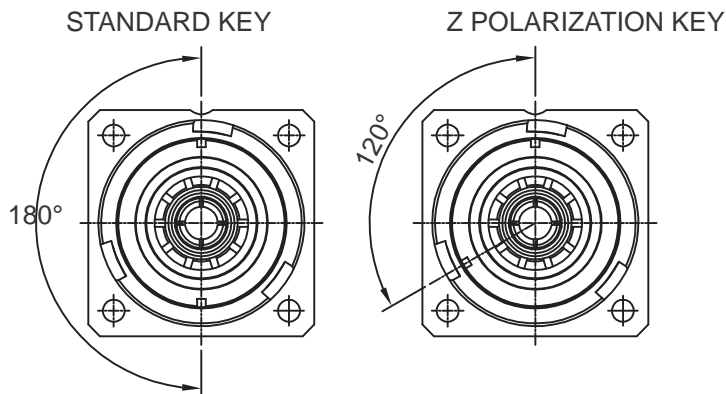
SHELL SIZE	D1		D2			E
	FRONT	REAR	A2	C2	C1/B1	
16	22.50	27.70	M4	M4	4.50	24.60
18	27.40	31.10	M4	M4	4.50	27.00
22	33.70	37.80	M4	M4	4.50	31.80
28	43.30	47.10	M4	M5	5.50	39.70
32	49.70	53.80	M4	M5	5.50	44.50

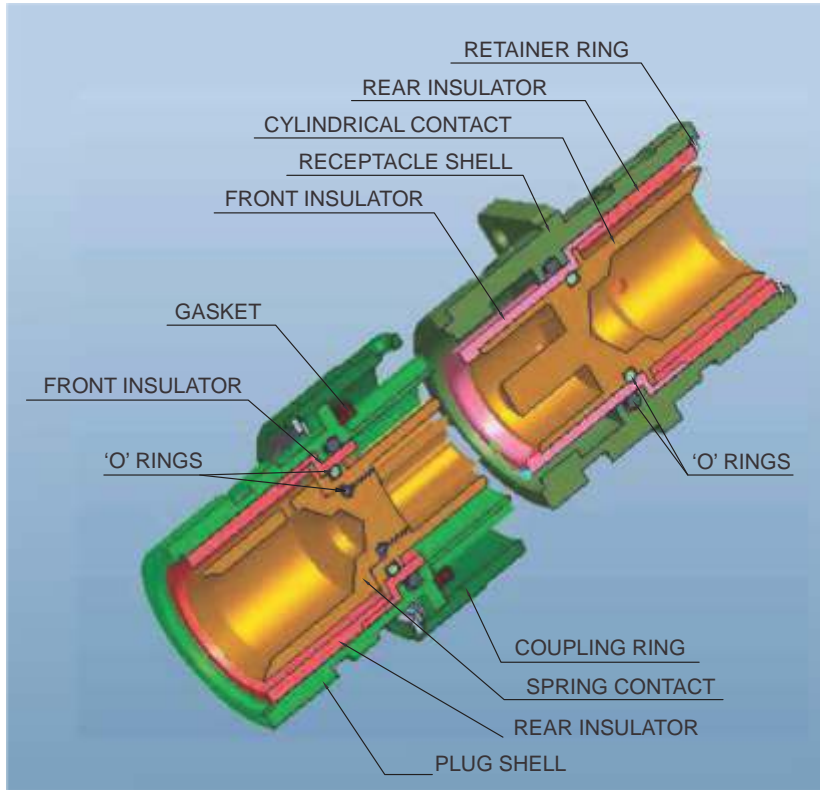
## ALTERNATIVE KEY POSITION

### PLUG CONNECTORS



### RECEPTACLE CONNECTORS

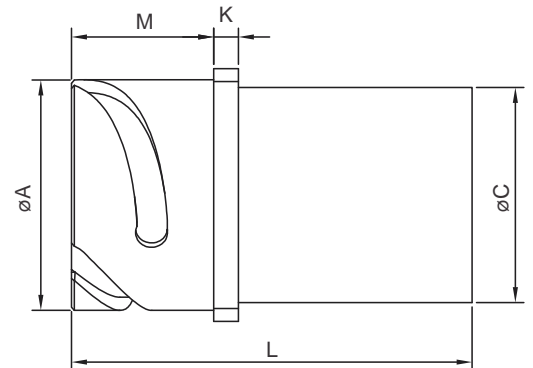
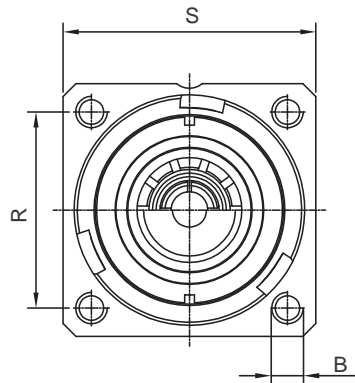




CONNECTOR ASSEMBLY

## AGE96929A1

Box Mount Receptacle  
 Rear Panel Mounting  
 Four Threaded Holes in Flange  
 Crimp Contact

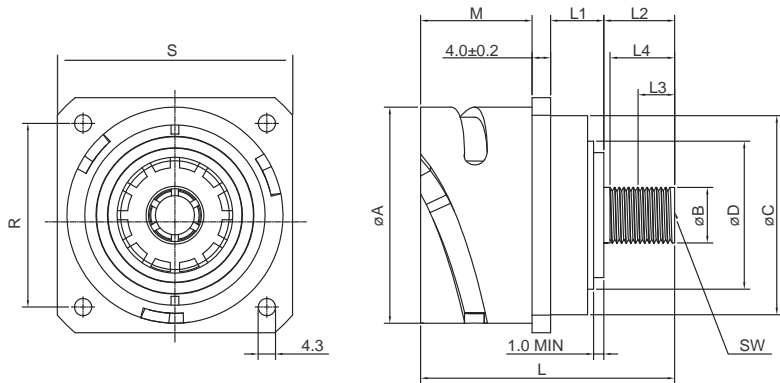


SHELL SIZE	A	B	B	C	K	L	M	R	S
	-0.15		+0.2	±0.15	±0.1	±0.3	±0.3	±0.1	±0.3
16	27.4	M4	4.3	22.1	3.2	41.0	20.0	24.6	32.5
18	30.8	M4	4.3	27.0	4.0	50.0	23.15	27.0	35.0
22	37.4	M4	4.3	34.9	4.0	54.0	23.15	31.8	41.0
28	46.7	M5	4.3	44.4	4.0	65.3	24.15	39.7	50.8
32	53.4	M5	4.3	49.2	4.0	66.8	29.0	44.5	57.0



## AGE96929A2

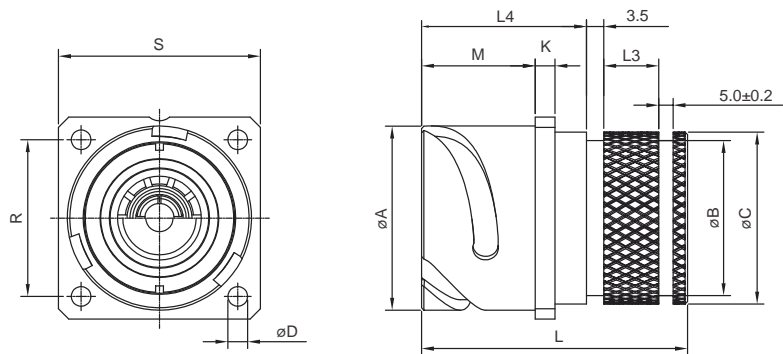
Box Mount Receptacle  
 Front Panel Mounting  
 Four Threaded Holes in Flange  
 Contact Bolt Termination



SHELL SIZE	A -0.15	B	C -0.15	D -0.15	M ±0.4	L4 MIN	L1 ±1.5	L2 ±0.3	L3 ±0.3	L MAX	R ±0.1	S ±0.3	SW ±0.2
18	30.8	M8	26.9	15.0	23.05	12	12.0	15.0	10.0	55.0	27.0	35.0	3
22	37.4	M12	33.2	18.7	23.05	22	13.5	25.0	8.0	66.0	31.8	41.0	6
28	46.6	M12	42.8	27.0	24.05	16	12.0	20.0	8.0	62.0	39.7	50.8	6
32	53.4	M16	49.2	31.7	28.90	27	14.0	30.0	8.0	78.0	44.5	57.0	8

## AGE96929B1

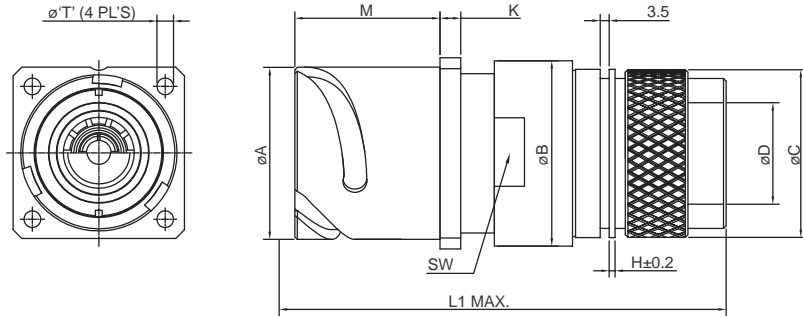
Wall Mount Receptacle  
 Four Threaded Holes in Flange  
 Heat Shrinkable Endshell  
 Crimp Contact



SHELL SIZE	A -0.15	B MAX	C MAX	D	L3 ±0.2	L4 ±2.0	L ±0.4	R ±0.1	M ±0.4	K ±0.3	S ±0.3
16	27.4	20.3	22.7	M4	-	29.0	41.0	24.6	20.0	3.2	32.5
18	30.8	25.8	28.4	M4	-	32.0	50.0	27.0	23.05	4.0	35.0
22	37.4	33.0	35.3	M4	-	34.0	54.0	31.8	23.05	4.0	41.0
28	46.6	41.3	44.8	M5	18	38.0	65.3	39.7	24.85	4.0	50.8
32	53.4	46.1	49.6	M5	18	39.0	66.8	44.5	28.9	4.0	57.0

## AGE96929B2

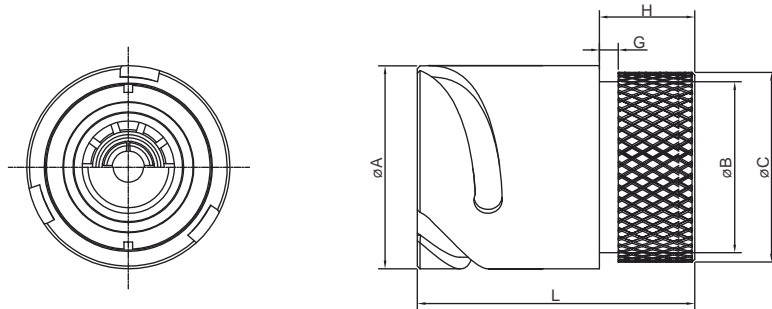
- Box Mount Receptacle shell
- Rear Panel Mounting
- Four Holes in Flange
- Shielded Version
- Heat Shrinkable Endshell
- Crimp Contact



SHELL SIZE	$\phi A$ -0.15	$\phi B$ MAX	$\phi C$ MAX	$\phi D$ MIN	SW	H	L1 MAX	M	K	T
18	30.8	36.5	32	20	32	1.0	76	23.05	4.0	4.3
22	53.4	60.0	51.6	38.0	52/54	2.0	98.0	29.0	4.0	4.3

## AGE96929B3

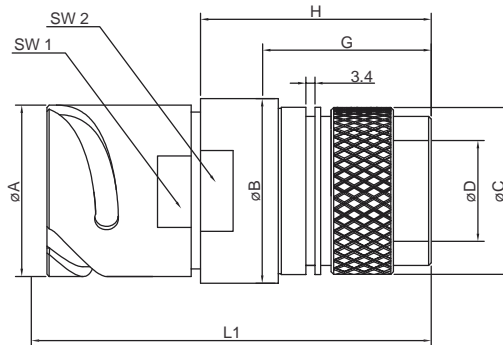
- Cable Connecting Receptacle
- Adaptor For Heat Shrink Boot
- Heat Shrinkable Endshell
- Crimp Contact



SHELL SIZE	A -0.15	B $\pm 0.15$	C $\pm 0.15$	L $\pm 0.3$	H $\pm 0.15$	G $\pm 0.3$
18	30.8	25.0	27.0	50.0	20.0	3.2
22	37.4	31.5	34.9	54.0	20.5	3.2
28	46.7	41.0	44.4	65.8	25.0	3.5
32	53.4	45.8	50.0	66.8	28.0	3.5

## AGE96929B14

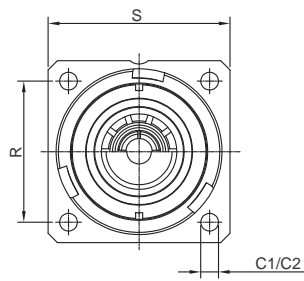
Cable Connecting Receptacle  
 Shielded Version  
 Heat Shrinkable Endshell  
 Crimp Contact



SHELL SIZE	øA -0.15	øB	øC	øD ±0.3	G ±0.2	H MAX	L1 MAX	SW 1	SW 2
18	37.4	42.0	37.0	25.5	22.5	48.5	95.5	34	38

## AGE96929C1

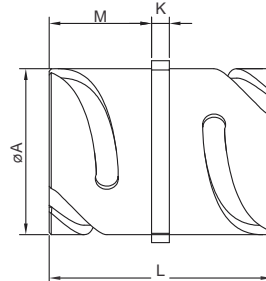
Bulkhead Connector  
 Four Through Holes in Flange



SHELL SIZE	A -0.15	C1	C2	M		K ±0.2	R ±0.1	S ±0.3	L MAX
				MIN	MAX				
22	37.4	M4	4.3	16	24.0	4.0	31.8	41.0	52.1
28	46.7	M5	5.3	18	23.6	4.0	39.7	50.8	52.1
32	53.4	M5	5.3	19	25.2	4.0	44.5	57.0	60.5

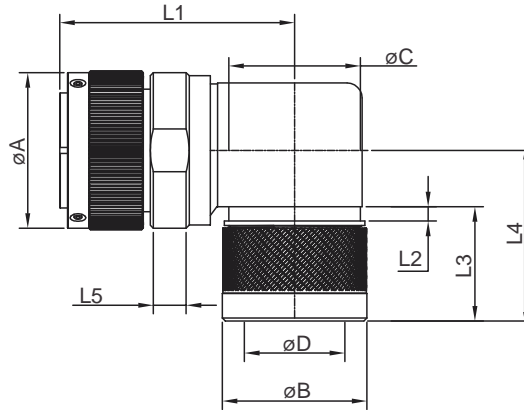
## AGE96929C2

Bulkhead Connector  
 Four Through Holes in Flange



## AGE96929E

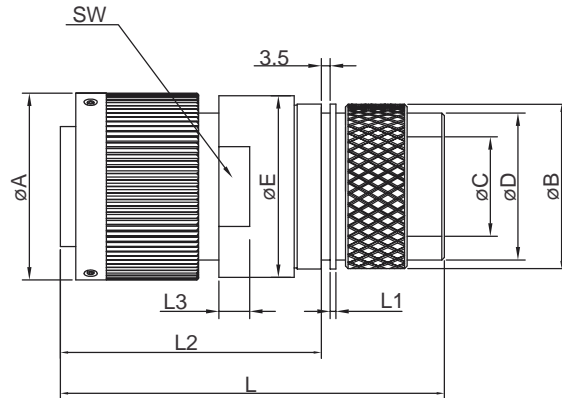
90° Plug  
 360° Shielding by Grounding Finger (RFI)  
 Shielded Version  
 Heat Shrinkable Endshell  
 Crimp Contact (Metric)



SHELL SIZE	A MAX	B MAX	C MAX	D ±0.3	L1 MAX	L2 ±0.2	L3 MAX	L4 MAX	L5 MIN	SW
22	43.1	42.5	39.0	28.0	81.0	2.9	41.5	57	6.0	38
28	53.5	48.0	43.7	39.0	79.0	3.2	41.5	58	7.5	50
32	60.1	52.5	48.6	42.0	84.0	3.2	41.5	65	6.0	52

## AGE96929F

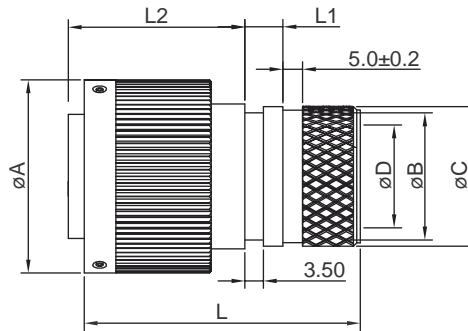
Straight Plug  
 360° Shielding by Grounding Finger (RFI)  
 Shielded Version  
 Heat Shrinkable Endshell  
 Crimp Contact (Metric)



SHELL SIZE	A MAX	B MAX	C MIN	D MAX	E MAX	L1 ±0.7	L2 MAX	L3 MIN	L MAX	SW
16	32.0	26.0	15.5	24.1	32.0	1.0	45.6	8	70.0	26
18	36.5	32.0	20.0	28.8	36.5	1.0	51.1	6	76.0	32
22	43.1	37.0	25.5	34.1	46.0	1.0	61.0	9	86.0	38
28	53.0	44.0	32.0	40.7	53.0	1.0	71.7	9	98.0	50
32	60.1	56.1	38.0	47.3	60.0	2.0	70.7	12	98.0	52/54

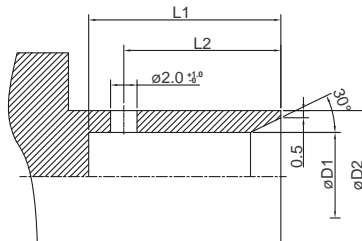
AGE96929G

Straight Plug  
Heat Shrinkable Endshell  
Crimp Contact (Metric)



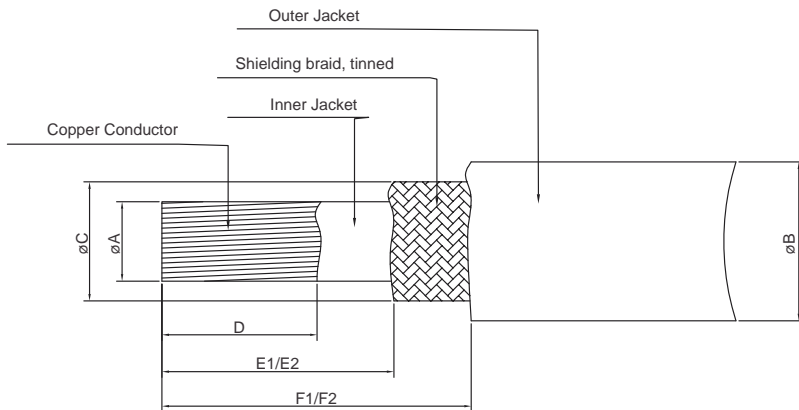
SHELL SIZE	A MAX	B MAX	C MAX	D MIN	L1	L2 MAX	L MAX
16	32.0	20.2	22.7	14.0	-	25.0	44.0
18	36.5	25.8	28.4	19.0	-	33.0	53.0
22	43.1	31.5	35.3	23.9	13.3	37.0	57.0
28	53.5	41.3	44.8	27.3	18.0	37.0	65.0
32	60.1	46.1	49.6	32.8	15.0	39.0	65.0

## CONTACT CRIMPING SLEEVE DIMENTIONS



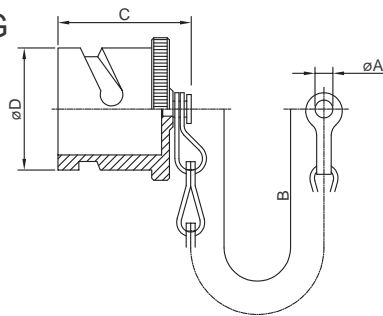
CONTACT SIZE	CROSS SECTION MM <sup>2</sup>	øD1 +0.3	øD2 ±0.2	L1 ±0.2	L2
25	25	7.7	10.9	14.0	11.0
50	50	11.2	16.0	15.0	13.0
95	95	16.2	21.0	20.5	18.5
150	150	20.9	27.0	28.0	25.5
240	240	26.8	31.6	30.0	27.0

## CABLE DIMENSIONS



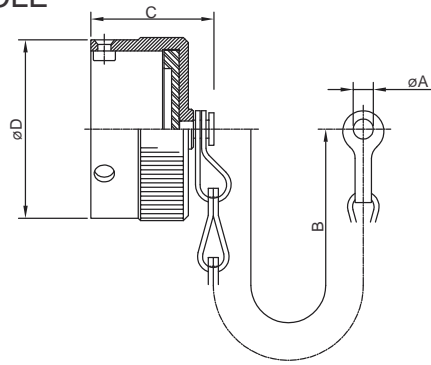
SHELL SIZE	WIRE SIZE MM <sup>2</sup>	øA±0.5	øB MAX	øC MAX	D±10.5	STRAIGHT PLUG		PLUG 90°	
						E1±1.0	F1±1.0	E2±1.0	F2±1.0
16	25	7.5	13.5	10.2	14.0	31.0	46.0	-	-
18	50	11.0	18.0	14.3	15.0	31.0	46.0	-	-
22	95	16.0	23.5	19.7	20.5	42.0	57.0	20.0	35.0
28	150	20.5	30.0	25.4	30.0	-	-	25.0	40
32	240	26.5	36.0	32.5	30.0	54.0	69.0	25.0	40

## DUST CAP FOR PLUG



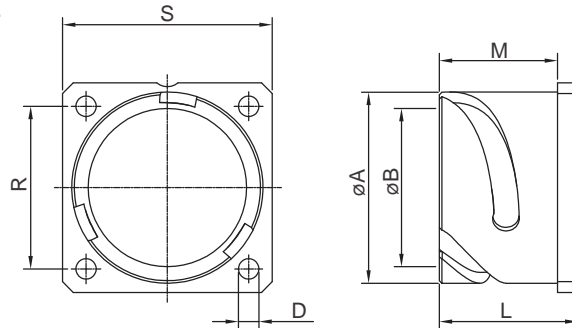
ORDER REFERENCE	SHELL SIZE	A ±0.5	B ±10.0	C MAX	D MAX
AGE-250402-16	16	4.3	113	29.0	29.9
AGE-250402-18	18	4.3	127	30.0	33.3
AGE-250402-22	22	4.3	140	30.0	39.9
AGE-250402-28	28	4.3	197	30.0	49.2
AGE-250402-32	32	4.3	197	30.0	55.9

## DUST CAP FOR RECEPTACLE



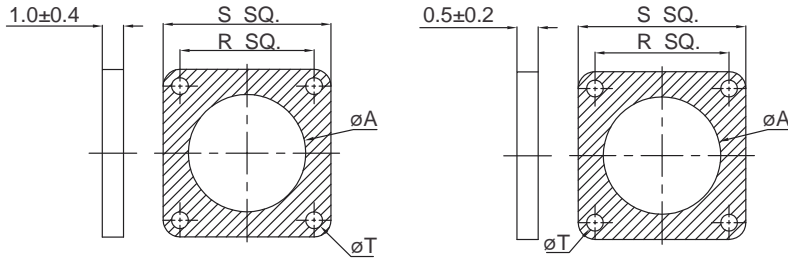
ORDER REFERENCE	SHELL SIZE	A ±0.5	B ±10.0	C MAX	D MAX
AGE-250403-16	16S	4.3	100	19.5	32.6
AGE-250403-18	18	4.3	113	25.4	36.7
AGE-250403-22	22	4.3	127	25.4	43.3
AGE-250403-28	28	4.3	169	25.4	52.6
AGE-250403-32	32	4.3	169	25.4	59.3

## DUMMY RECEPTACLE



Part No.	SHELL SIZE	A +0.15	B +0.1	D +0.2	D	M +0.3/-0.1	L ±0.2	R ±0.15	S ±0.3
AGEDR-16	16S	27.4	29.6	3.2	M4	18.3	21.5	24.6	32.5
AGEDR-18	18	30.8	23.8	3.2	M4	23.15	27.2	27.0	35.0
AGEDR-22	22	37.4	30.0	3.2	M4	23.15	27.2	31.8	41.0
AGEDR-28	28	46.7	38.8	3.7	M5	24.15	28.2	39.7	50.8
AGEDR-32	32	53.4	45.2	4.4	M5	24.15	28.2	44.5	57.0

## GASKET FOR FRONT PANEL MOUNTING CONNECTOR



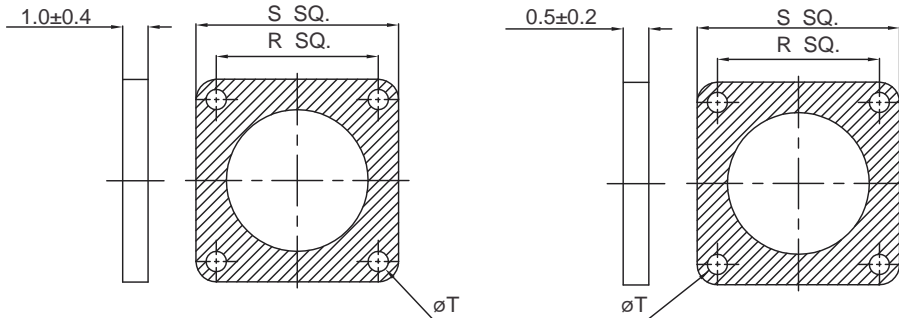
CONDUCTIVE GASKET

NON CONDUCTIVE GASKET

AIPL PART NO.	øA +1	R ±0.2	S ±0.5	øT +0.5
AGE-FSQG-16	25.3	24.6	32.5	4.2
AGE-FSQG-18	28.4	27.0	35.0	4.2
AGE-FSQG-22	34.8	31.8	41.0	4.2
AGE-FSQG-28	44.3	39.7	50.8	5.1
AGE-FSQG-32	50.7	44.5	57.0	5.1

NOTE:- FOR CONDUCTIVE GASKET PART NO. AGE-FSQG-XXCG

## GASKET FOR REAR PANEL MOUNTING CONNECTOR



CONDUCTIVE GASKET

NON CONDUCTIVE GASKET

AIPL PART NO.	øA +1	R ±0.2	S ±0.5	øT +0.5
AGE-RSQG-16	27.4	24.6	32.5	4.2
AGE-RSQG-18	30.8	27.0	35.0	4.2
AGE-RSQG-22	37.4	31.8	41.0	4.2
AGE-RSQG-28	46.7	39.7	50.8	5.1
AGE-RSQG-32	53.4	44.5	57.0	5.1

NOTE:- FOR CONDUCTIVE GASKET PART NO. AGE-RSQG-XXCG



## CRIMPING TOOL

Battery Powered Hydraulic Operated Crimping Tool

CONTACT SIZE	CROSS SECTION MM <sup>2</sup>	CRIMPING TOOL NO.
25	25	EK12042
50	50	EK12042
95	95	EK12042
150	150	EK12042
240	240	EK12042







# Amphenol

*A Global Company*



Pune Operations



Bangalore Operations

# Amphenol

Interconnect India Pvt. Ltd.

## Manufacturing Locations

### Corporate Office & Pune Factory

105, Bhosari Industrial Area, Pune - 411 026.  
Tel.: 91-20-67360302  
Fax : 91-20-67360321  
Email : rjohn@amphenol-in.com

### Exports

Tel.: 91-20-6736 0305, 6736 0353  
Email : svpatil@amphenol-in.com

### Bangalore Factory

61, Keonics Electronic City, Hosur Road,  
Bangalore - 560 102.  
Mobile : 91-6679 0900 /910 /937  
Email : shrikantgramopadhye@amphenol-in.com

## Marketing Locations

### Marketing Headquarters

Tel.: 91-20-6736 0303, 6736 0304  
Fax : 91-20-6736 0321  
Email : vbhavsar@amphenol-in.com  
Email : sales@amphenol-in.com

### Western Region

Tel.: 91-20-6736 0334  
Email : sunilp@amphenol-in.com

### Northern & Eastern Region

A-421, Pacific Business Park,  
Plot No. 37/1, Sahibabad Indst. Area  
Site IV, Ghaziabad (UP) - 201 010.  
Mobile : 91-99102 11399  
Email : sunily@amphenol-in.com

### Southern Region

No. 1115, 22nd Main Road, 11th Cross,  
Sector -1, HSR Layout, Bangalore - 560 102.  
Tel.: 91-80-4953 0341, 4953 0345  
Fax: 91-80-4953 8697  
Email : kmanoj@amphenol-in.com

### Central Region

107, 1st Floor, 'Am Sri Classic',  
Sarojinidevi Road, Secunderabad - 500 003.  
Telefax : 91-40-6633 2906  
Email : pprasad@amphenol-in.com