



AMPHENOL PCD SHENZHEN



# ASGTC

Ruggedized Connector Series for Rail & Mass Transit  
and Other Harsh Environmental Applications

INDUSTRIAL@AMPHENOL  
TRUSTED GLOBALLY

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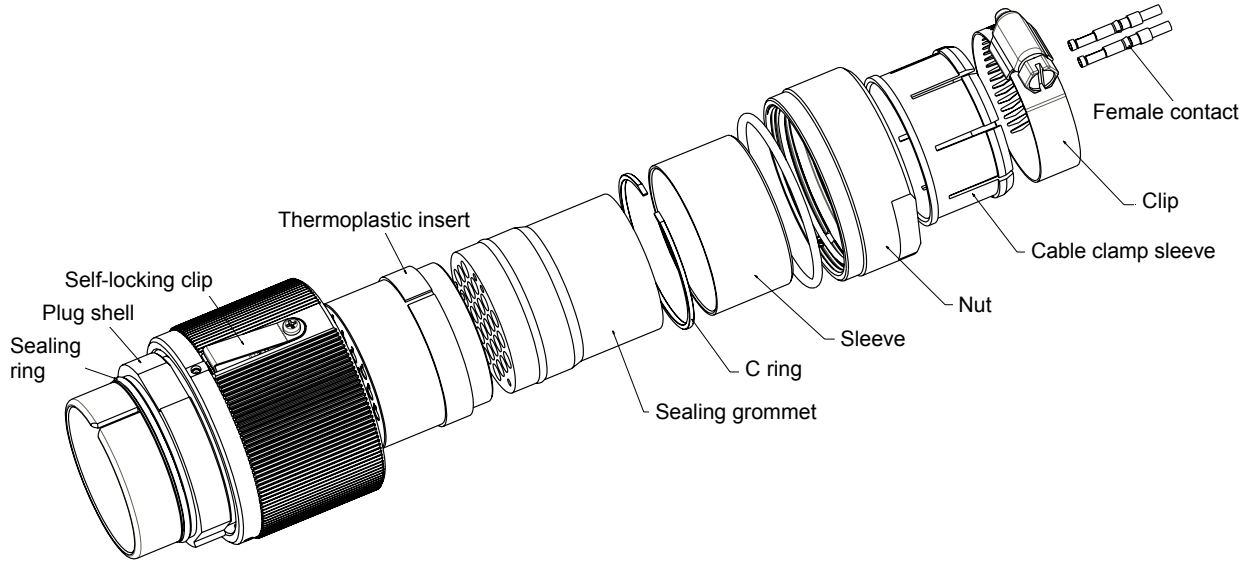
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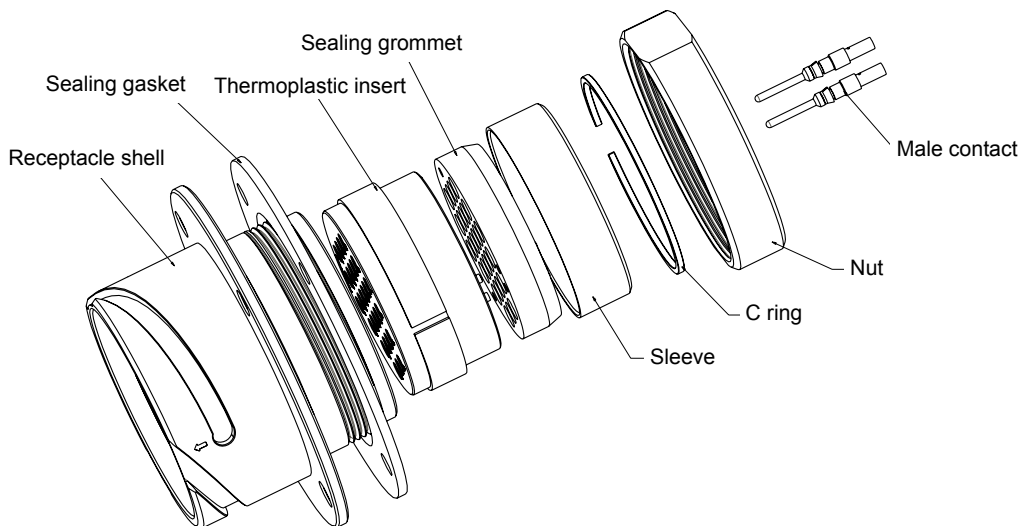
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# CONNECTOR STRUCTURE

## PLUG



## RECEPTACLE



## PRODUCT INTRODUCTION

- ASGTC Series connector designed for railway and mass transit industry, including ASGTC, ASGTCN, ASGTCK.
- It's environmental cylindrical reverse bayonet coupling connector with self-locking system, which guarantee a fast locking and unlocking.
- High performance, rugged sealed connector with waterproof IP67 rated, robust shells for high temperature resistance and resistant to vibrations and shocks.

### ASGTC: With self-locking system



### ASGTCN: 1 key without self-locking system

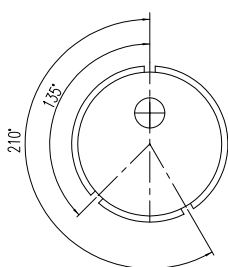


# INTRODUCTION

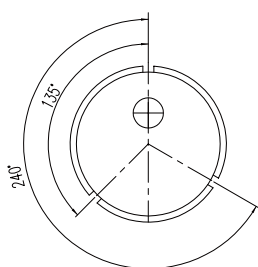
- ASGTCK It's environmental cylindrical reverse bayonet coupling connector with self-locking system (upon request) and alternate position.
- ASGTCK: 3 key and with self-locking system



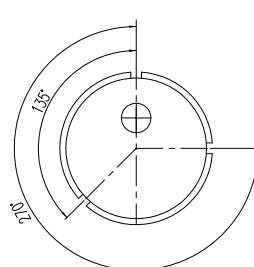
## Alternate position



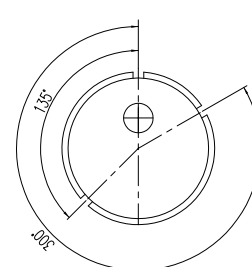
W: 210°



X: 240°



Y: 270°



Z: 300°



**KEY FEATURES**

Special safety locking system, durable for high vibration and shocking condition

Anti cross-plugging key in the shell

Resistant to vibrations and shocks

Various of insert arrangement available

Sealing, IP67

MECHANICAL	
Durability	≥ 500 mating cycles
Vibration & shock	According to TB2761-1996 / IEC 61373-1999 (GB/T 21563-2008) Category 2
Contact retention force	#16: 70N #12: 90N #8: 110N
ELECTRICAL	
Rated current	#16: 13A #12: 23A #8 (Normal): 46A #8 (Radsok): 70A #4: 80A
Rated voltage	PB/T133.1-2002 / IEC60077-1:1999. Refer to page 6
Dielectric withstand voltage	2Ui+2000V (1 min.)
Contact resistance NFF61030	#16: 2.5mΩ Max #12: 1.3mΩ Max #8: 0.9mΩ Max
Insulator resistance	≥ 5000MΩ (DC500V)
Temperature rise	≤ 60K
ENVIRONMENTAL	
Temperature range	-55°C to 125°C
Humidity	90% to 95% (40±2°C)
Sealing	IP67 (DIN EN 60529)
Salt spray	96h (Zinc), 48h (Nickel)
MATERIAL	
Shell	Alu.alloy, zinc, nickel or anodic oxidation plating
Inserts	Thermoplastic
Contact	Copper alloy, gold or silver plating
Sealing gasket	Silicon rubber

# INSERT ARRANGEMENT

FRONT FACE OF RECEPTACLE

CONTACTS



16



12



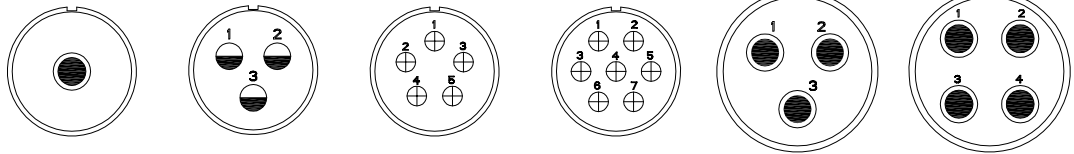
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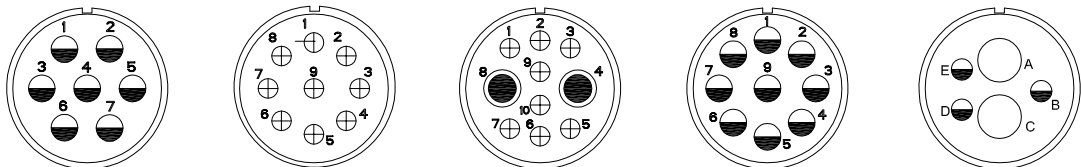
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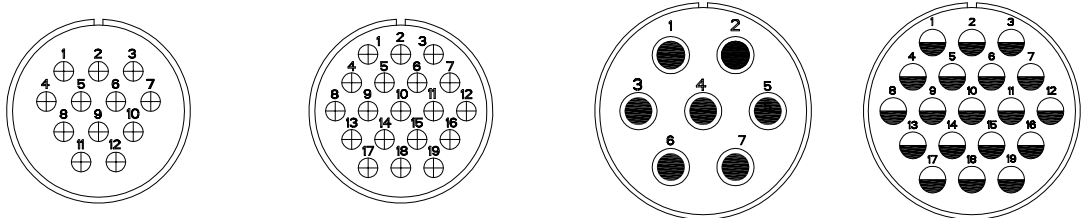
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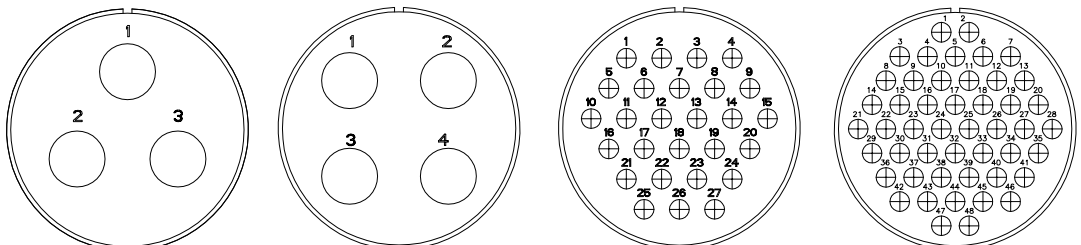
Insert arrangement	20-01	20-03	20-05	20-07	24-03	24-M4
Rated voltage	800V	500V	500V	500V	630V	500V
Rated current	46A	23A	13A	13A	46A(Normal)/70A(Radsok)	46A
Contact number	1	3	5	7	3	4
Contact size	#8	#12	#16	#16	#8	#8
Withstanding voltage	3500V	3000V	3000V	3000V	3200V	3000V



Insert arrangement	24-07	24-09	24-M2	24-M3	24-M5
Rated voltage	500V	500V	250V	250V	500V
Rated current	23A	13A	46A/13A	23A	80A/23A
Contact number	7	9	10	9	2X#4, 3X#12
Contact size	#12	#16	2X#8, 8X#16	#12	#4, #12
Withstanding voltage	3000V	3000V	2500V	2500V	3000V



Insert arrangement	28-12	28-19	32-07	32-19
Rated voltage	500V	320V	500V	320V
Rated current	13A	13A	70A(Radsok)	23A
Contact number	12	19	7	19
Contact size	#16	#16	#8	#12
Withstanding voltage	3000V	2600V	3000V	2600V



Insert arrangement	36-03	36-04	36-27	36-48
Rated voltage	500V	500V	500V	320V
Rated current	70A(Radsok)	70A(Radsok)	13A	13A
Contact number	3	4	27	48
Contact size	#4	#4	#16	#16
Withstanding voltage	3000V	3000V	3000V	2600V

Cable mounted receptacle ASGTC0L-D	Cable mounted receptacle ASGTC1L-D	Cable mounted receptacle ASGTC0L-LF	Cable mounted receptacle ASGTC1L-LF
			
Cable mounted receptacle ASGTC2L	Cable mounted receptacle ASGTC3L	Wall mounted receptacle ASGTC3A	Straight plug ASGTC6L-D
			
Straight plug ASGTC6L-A	Straight plug ASGTC6L-LF	Straight plug ASGTC6A-B	R/A plug ASGTC8A-LF
			
Receptacle protection cap ASGTC25043-LC	Plug protection cap ASGTC25042-LC	Male & female contact	Sealing plug
			



# HOW TO ORDER

**ASGTC 6 L 20 01 S C A / / X**

**ASGTC:** With self-locking system  
**ASGTCN:** 1 key without self-locking system  
**ASGTCK:** 3 key and with self-locking system

**Connector type:**

- 0:** Cable mounted receptacle (Circular flange)
- 1:** Cable mounted receptacle (Square flange)
- 2:** Wall or box mounted receptacle (Circular flange)
- 3:** Wall or box mounted receptacle (Square flange)
- 5:** Jam nut receptacle
- 6:** Straight plug
- 8:** R/A plug

**Service class:**

- L:** Water proof
- A:** Non-watertight

**Shell size:**

20, 24, 28, 32, 36

**Insert arrangement:**

Please refer to P6

**Contact type:**

- P:** Pin
- S:** Socket

**Contact wire type:**

- C:** Crimp
- M:** Screw

**Backshell:**

- A:** Cable clamp without sleeve
- B:** Cable clamp with sleeve
- D:** Nut
- LF:** With hoop
- M:** Metric thread
- PG:** PG thread

**Cable entry size:**

- (A,B,D) 20:**  $\Phi 20$ , others please refer to page 9 to 15
- (M) 25:** M25 thread, other size please contact us.
- (PG) 21:** PG21 thread

**Shell plating:**

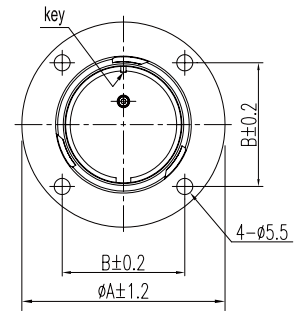
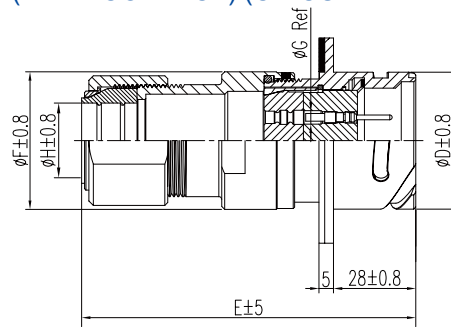
- Omit:** Olive drab zinc
- BA:** Black Anodized
- GA:** Green Anodized
- HA:** Hard Anodized
- BZ:** Black zinc
- NI:** Nickel

**Alternate position (For ASGTCK):**

- W:** 210°
- X:** 240°
- Y:** 270°
- Z:** 300°

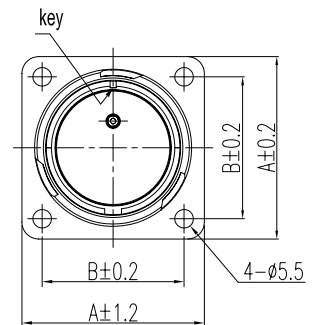
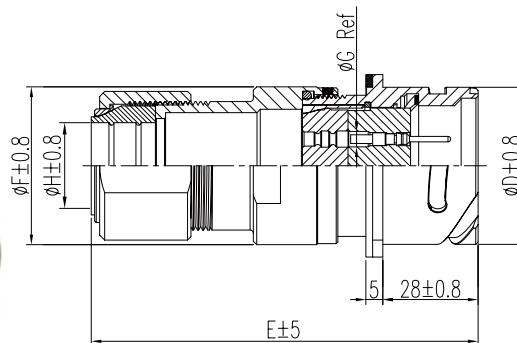
## WATERPROOF RECEPTACLE

### CABLE MOUNTED RECEPTACLE (MALE CONTACT) (CIRCULAR FLANGE) ASGTC0L-D: FOR CABLE



Insert arrangement	Shell size	Contact number	$\Phi A \pm 1.2$	$B \pm 0.2$	$\Phi D \pm 0.8$	$E \pm 5$	$\Phi F \pm 0.8$	$\Phi G$ Ref.	$\Phi H \pm 0.8$
20-01	20	1 x #8	57	33	35	105	36	8.0	10
20-03	20	3 x #12	57	33	35	105	36	6.5	20
20-05	20	5 x #16	57	33	35	105	36	4.6	20
20-07	20	7 x #16	57	33	35	105	36	4.6	20
24-03	24	3 x #8	66	38	41.5	110	42	8.0	22
24-07	24	7 x #12	66	38	41.5	110	42	6.5	22
24-09	24	9 x #16	66	38	41.5	110	42	5.5	22
24-M2	24	8 x #16 + 2 x #8	66	38	41.5	110	42	4.6	22
24-M3	24	9 x #12	66	38	41.5	110	42	4.6 / 8.0	22
24-M4	24	4 x #8	66	38	41.5	110	42	8.0	22
24-M5	24	3 x #12 + 2 x #4	66	38	41.5	110	42	6.5 / 11.0	22
28-12	28	12 x #16	70	42	46.5	115	47	4.6	25
28-19	28	19 x #16	70	42	46.5	115	47	4.6	25
32-07	32	7 x #8	75	46	53	120	53	8.0	26
32-19	32	19 x #12	75	46	53	120	53	6.5	26
36-03	36	3 x #4	85	52	58.5	130	60	15.5	28
36-04	36	4 x #4	85	52	58.5	130	60	15.5	28
36-27	36	27 x #16	85	52	58.5	130	60	4.6	31
36-48	36	48 x #16	85	52	58.5	130	60	4.6	31

### CABLE MOUNTED RECEPTACLE (MALE CONTACT) (SQUARE FLANGE) ASGTC1L-D: FOR CABLE



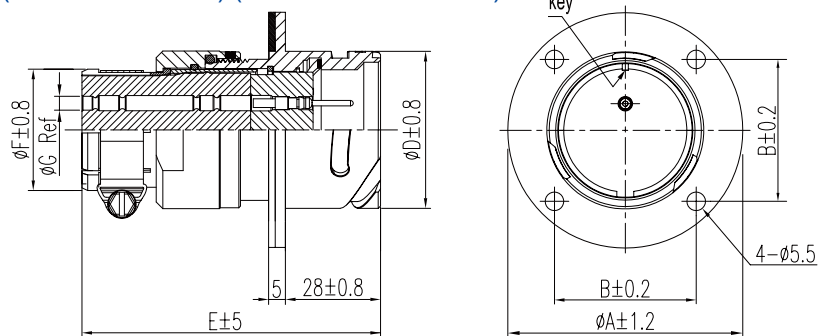
Insert arrangement	Shell size	Contact number	$A \pm 1.2$	$B \pm 0.2$	$\Phi D \pm 0.8$	$E \pm 5$	$\Phi F \pm 0.8$	$\Phi G$ Ref.	$\Phi H \pm 0.8$
20-01	20	1 x #8	43	33	35	105	36	8.0	10
20-03	20	3 x #12	43	33	35	105	36	6.5	20
20-05	20	5 x #16	43	33	35	105	36	4.6	20
20-07	20	7 x #16	43	33	35	105	36	4.6	20
24-03	24	3x #8	50	38	41.5	110	42	8.0	22
24-07	24	7 x #12	50	38	41.5	110	42	6.5	22
24-09	24	9 x #16	50	38	41.5	110	42	4.6	22
24-M2	24	8 x #16 + 2 x #8	50	38	41.5	110	42	4.6 / 8.0	22
24-M3	24	9 x #12	50	38	41.5	110	42	6.5	22
24-M4	24	4 x #8	50	38	41.5	110	42	8.0	22
24-M5	24	3 x #12 + 2 x #4	50	38	41.5	110	42	6.5 / 11.0	22
28-12	28	12 x #16	54	42	46.5	115	47	4.6	25
28-19	28	19 x #16	54	42	46.5	115	47	4.6	25
32-07	32	7 x #8	59	46	53	120	53	8.0	26
32-19	32	19 x #12	59	46	53	120	53	6.5	26
36-03	36	3 x #4	65	52	58.5	120	60	15.5	28
36-04	36	4 x #4	65	52	58.5	120	60	15.5	28
36-27	36	27 x #16	65	52	58.5	130	60	4.6	31
36-48	36	48 x #16	65	52	58.5	130	60	4.6	31

# RECEPTACLES

## WATERPROOF RECEPTACLE

### CABLE MOUNTED RECEPTACLE (MALE CONTACT) (CIRCULAR FLANGE)

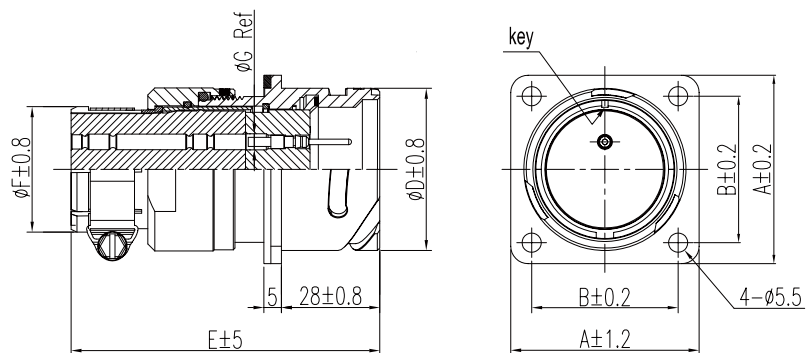
ASGTC0L-LF: FOR WIRE



Insert arrangement	Shell size	Contact number	$\phi A \pm 1.2$	$B \pm 0.2$	$\phi D \pm 0.8$	$E \pm 5$	$\phi F \pm 0.8$	$\phi G$ Ref.
20-01	20	1 x #8	57	33	35	90	26	5.5
20-03	20	3 x #12	57	33	35	90	26	4.0
20-05	20	5 x #16	57	33	35	90	26	3.5
20-07	20	7 x #16	57	33	35	90	26	3.5
24-03	24	3 x #8	66	38	41.5	90	31	5.5
24-07	24	7 x #12	66	38	41.5	90	31	4.0
24-09	24	9 x #16	66	38	41.5	90	31	3.5
24-M2	24	8 x #16 + 2 x #8	66	38	41.5	90	31	3.5 / 5.5
24-M3	24	9 x #12	66	38	41.5	90	31	5.5
24-M4	24	4 x #8	66	38	41.5	90	31	8.0
24-M5	24	3 x #12 + 2 x #4	66	38	41.5	90	31	6.5 / 11
28-12	28	12 x #16	70	42	46.5	90	36	3.5
28-19	28	19 x #16	70	42	46.5	90	36	3.2
32-07	32	7 x #8	75	46	53	90	43	8.0
32-19	32	19 x #12	75	46	53	90	43	4.0
36-03	36	3 x #4	101	52	58.5	101	48	12
36-04	36	4 x #4	101	52	58.5	101	48	12
36-27	36	27 x #16	85	52	58.5	90	48	3.5
36-48	36	48 x #16	85	52	58.5	90	48	3.2

### CABLE MOUNTED RECEPTACLE (MALE CONTACT) (SQUARE FLANGE)

ASGTC1L-LF: FOR WIRE

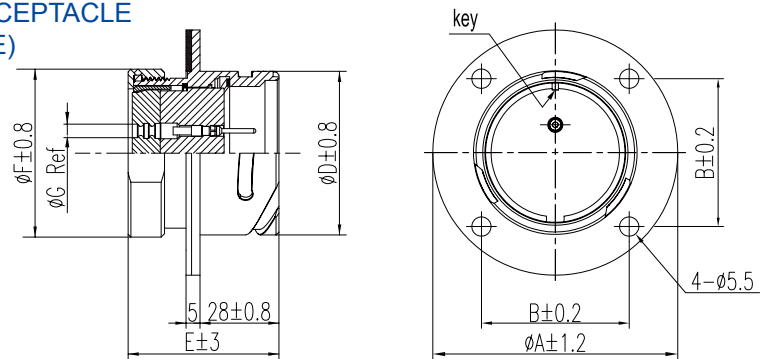


Insert arrangement	Shell size	Contact number	$A \pm 1.2$	$B \pm 0.2$	$\phi D \pm 0.8$	$E \pm 5$	$\phi F \pm 0.8$	$\phi G$ Ref.
20-01	20	1 x #8	43	33	35	90	26	5.5
20-03	20	3 x #12	43	33	35	90	26	4.0
20-05	20	5 x #16	43	33	35	90	26	3.5
20-07	20	7 x #16	43	33	35	90	26	3.5
24-03	24	3 x #8	50	38	41.5	90	31	5.5
24-07	24	7 x #12	50	38	41.5	90	31	4.0
24-09	24	9 x #16	50	38	41.5	90	31	3.5
24-M2	24	8 x #16 + 2 x #8	50	38	41.5	90	31	3.5 / 5.5
24-M3	24	9 x #12	50	38	41.5	90	31	5.5
24-M4	24	4 x #8	50	38	41.5	90	31	8.0
24-M5	24	3 x #12 + 2 x #4	50	38	41.5	90	31	6.5 / 11
28-12	28	12 x #16	54	42	46.5	90	36	3.5
28-19	28	19 x #16	54	42	46.5	90	36	3.2
32-07	32	7 x #8	59	46	53	90	43	8.0
32-19	32	19 x #12	59	46	53	90	43	4.0
36-03	36	3 x #4	65	52	58.5	101	48	12
36-04	36	4 x #4	65	52	58.5	101	48	12
36-27	36	27 x #16	65	52	58.5	90	48	3.5
36-48	36	48 x #16	65	52	58.5	90	48	3.2

## WATERPROOF RECEPTACLE

### WALL MOUNTED / BOX MOUNTED RECEPTACLE (MALE CONTACT) (CIRCULAR FLANGE)

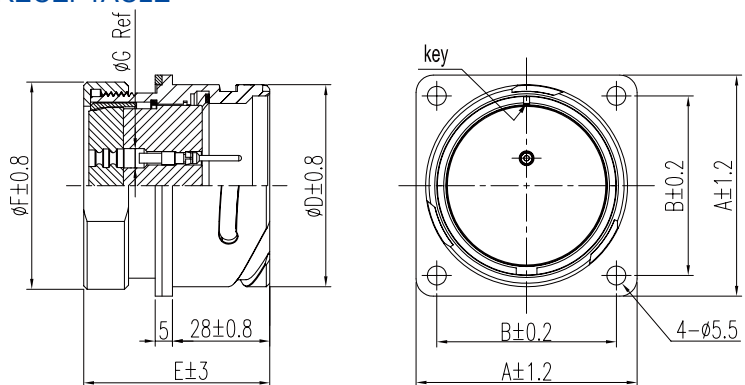
ASGTC2L: FOR WIRE



Insert arrangement	Shell size	Contact number	$\Phi A \pm 1.2$	$B \pm 0.2$	$\Phi D \pm 0.8$	$E \pm 5$	$\Phi F \pm 0.8$	$\Phi G$ Ref.
20-01	20	1 x #8	57	33	35	54	36	8.0
20-03	20	3 x #12	57	33	35	54	36	6.5
20-05	20	5 x #16	57	33	35	54	36	4.6
20-07	20	7 x #16	57	33	35	54	36	4.6
24-03	24	3 x #8	66	38	41.5	63	42	8.0
24-07	24	7 x #12	66	38	41.5	63	42	6.5
24-09	24	9 x #16	66	38	41.5	63	42	4.6
24-M2	24	8 x #16 + 2 x #8	66	38	41.5	63	42	4.6 / 8.0
24-M3	24	9 x #12	66	38	41.5	63	42	6.5
24-M4	24	4 x #8	66	38	41.5	63	42	8.0
24-M5	24	3x #12 + 2x #4	66	38	41.5	63	42	6.5 / 11
28-12	28	12 x #16	70	42	46.5	54	47	4.6
28-19	28	19 x #16	70	42	46.5	54	47	4.6
32-07	32	7 x #8	75	46	53	54	53	8.0
32-19	32	19 x #12	75	46	53	54	53	6.5
36-27	36	27 x #16	85	52	58.5	54	60	4.6
36-48	36	48 x #16	85	52	58.5	54	60	4.6

### WALL MOUNTED OR BOX MOUNTED RECEPTACLE (MALE CONTACT) (SQUARE FLANGE)

ASGTC3L: FOR WIRE

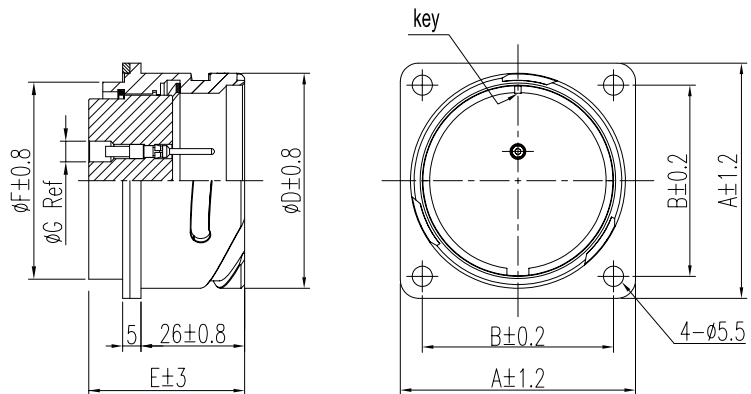


Insert arrangement	Shell size	Contact number	$A \pm 1.2$	$B \pm 0.2$	$\Phi D \pm 0.8$	$E \pm 5$	$\Phi F \pm 0.8$	$\Phi G$ Ref.
20-01	20	1 x #8	43	33	35	54	36	8.0
20-03	20	3 x #12	43	33	35	54	36	6.5
20-05	20	5 x #16	43	33	35	54	36	4.6
20-07	20	7 x #16	43	33	35	54	36	4.6
24-03	24	3 x #8	50	38	41.5	63	42	8.0
24-07	24	7 x #12	50	38	41.5	63	42	6.5
24-09	24	9 x #16	50	38	41.5	63	42	4.6
24-M2	24	8 x #16 + 2 x #8	50	38	41.5	63	42	4.6 / 8.0
24-M3	24	9 x #12	50	38	41.5	63	42	6.5
24-M4	24	4 x #8	50	38	41.5	63	42	8.0
24-M5	24	3 x #12 + 2 x #4	50	38	41.5	63	42	6.5 / 11
28-12	28	12 x #16	54	42	46.5	54	47	4.6
28-19	28	19 x #16	54	42	46.5	54	47	4.6
32-07	32	7 x #8	59	46	53	54	53	8.0
32-19	32	19 x #12	59	46	53	54	53	6.5
36-27	36	27 x #16	65	52	58.5	54	60	4.6
36-48	36	48 x #16	65	52	58.5	54	60	4.6

# RECEPTACLES

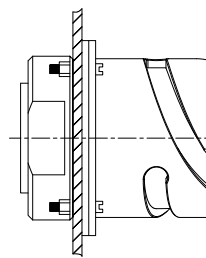
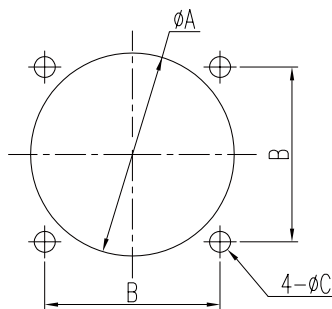
## WALL MOUNTED OR BOX MOUNTED RECEPTACLE (MALE CONTACT) (SQUARE FLANGE)

ASGTC3A

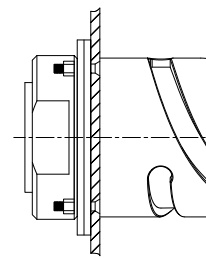


Insert arrangement	Shell size	Contact number	A $\pm$ 1.2	B $\pm$ 0.2	$\phi$ D $\pm$ 0.8	E $\pm$ 5	$\phi$ F $\pm$ 0.8	$\phi$ G Ref.
20-01	20	1 x #8	43	33	35	42	30	8.0
20-03	20	3 x #12	43	33	35	42	30	6.5
20-05	20	5 x #16	43	33	35	42	30	4.6
20-07	20	7 x #16	43	33	35	42	30	4.6
24-03	24	3 x #8	50	38	41.5	49	36	8.0
24-07	24	7 x #12	50	38	41.5	49	36	6.5
24-09	24	9 x #16	50	38	41.5	49	36	4.6
24-M2	24	8 x #16 + 2 x #8	50	38	41.5	49	36	4.6 / 8.0
24-M3	24	9 x #12	50	38	41.5	49	36	6.5
24-M4	24	4 x #8	50	38	41.5	56	36	8.0
24-M5	24	3 x #12 + 2 x #4	50	38	41.5	56	36	6.5 / 11
28-12	28	12 x #16	54	42	46.5	42	41	4.6
28-19	28	19 x #16	54	42	46.5	42	41	4.6
32-07	32	7 x #8	59	46	53	42	47	8.0
32-19	32	19 x #12	59	46	53	42	47	6.5
36-27	36	27 x #16	65	52	58.5	42	54	4.6
36-48	36	48 x #16	65	52	58.5	42	54	4.6

## PANEL MOUNTED DIMENSIONS



Front mounted



Rear mounted

Dimension: mm

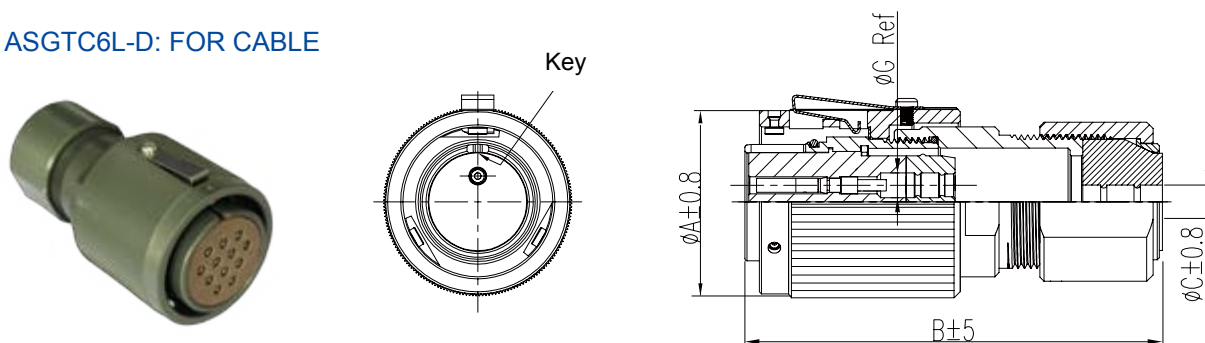
Shell size	$\phi A(\pm 0.1)$	B $\pm$ 0.2	$\phi C \pm 0.2$
	Front / Rear Mounted		
20	36	33	5.5
24	42.5	38	5.5
28	47.5	42	5.5
32	54	46	5.5
36	59.5	52	5.5

Remark: Panel thickness below 5mm for rear mounted and must use with nut.

## WATERPROOF PLUG

### STRAIGHT PLUG (FEMALE CONTACT)

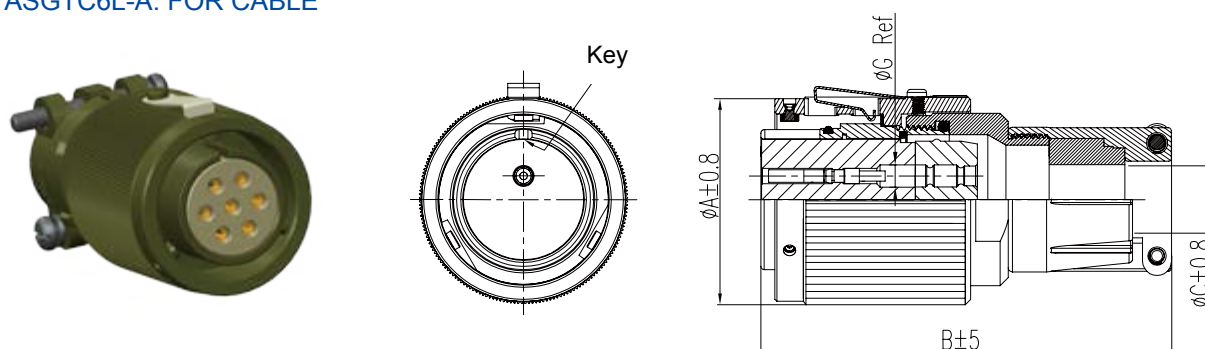
#### ASGTC6L-D: FOR CABLE



Insert arrangement	Shell size	Contact number	$\phi A \pm 0.8$	$B \pm 5$	$\phi C \pm 0.8$	$\phi G \text{ Ref.}$
20-01	20	1 x #8	45	100	10	8.0
20-03	20	3 x #12	45	100	20	6.5
20-05	20	5 x #16	45	100	20	4.6
20-07	20	7 x #16	45	100	20	4.6
24-03	24	3 x #8	50	110	22	8.0
24-07	24	7 x #12	50	110	22	6.5
24-09	24	9 x #16	50	110	22	4.6
24-M2	24	8 x #16 + 2 x #8	50	110	22	4.6 / 8.0
24-M3	24	9 x #12	50	110	22	6.5
24-M4	24	4 x #8	50	110	22	8.0
24-M5	24	3 x #12 + 2 x #4	50	110	22	6.5 / 11
28-12	28	12 x #16	56	110	25	4.6
28-19	28	19 x #16	56	110	25	4.6
32-07	32	7 x #8	62	115	26	8.0
32-19	32	19 x #12	62	115	26	6.5
36-03	36	3 x #4	68	135	28	15.5
36-04	36	4 x #4	68	135	28	15.5
36-27	36	27 x #16	68	125	31	5.5
36-48	36	48 x #16	68	125	31	4.5

### STRAIGHT PLUG (FEMALE CONTACT) WITH CABLE CLAMP BACKSHELL

#### ASGTC6L-A: FOR CABLE



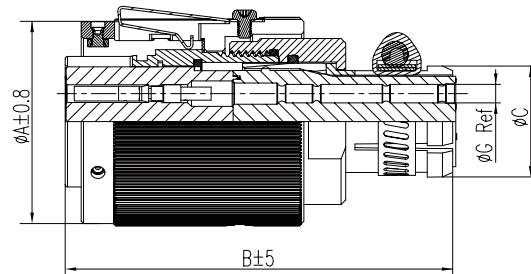
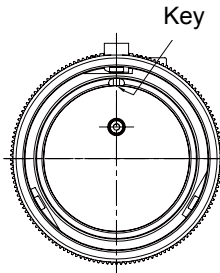
Insert arrangement	Shell size	$\phi A \pm 0.8$	$B \pm 5$	$\phi C \pm 0.8$	$\phi G \text{ Ref.}$
20-07	20	45	115	20	4.6
36-27	36	68	154	31.5	4.6
36-48	36	68	154	31.5	4.6

# PLUGS

## WATERPROOF PLUG

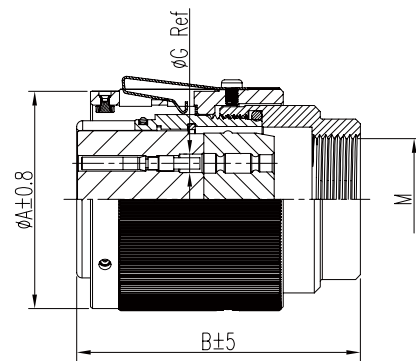
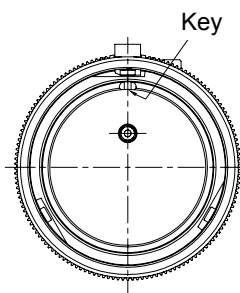
### STRAIGHT PLUG (FEMALE CONTACT)

#### ASGTC6L-LF: FOR WIRE



Insert arrangement	Shell size	Contact number	$\phi A \pm 0.8$	$B \pm 5$	$\phi C \pm 0.8$	$\phi G \text{ Ref.}$
20-01	20	1 x #8	45	85	26	5.5
20-03	20	3 x #12	45	85	26	4.0
20-05	20	5 x #16	45	85	26	3.5
20-07	20	7 x #16	45	85	26	3.5
24-03	24	3 x #8	50	85	31	5.5
24-07	24	7 x #12	50	85	31	4.0
24-09	24	9 x #16	50	85	31	3.5
24-M2	24	8 x #16 + 2 x #8	50	85	31	3.5 / 5.5
24-M3	24	9 x #12	50	85	31	5.5
24-M4	24	4 x #8	50	85	31	8.0
24-M5	24	3 x #12 + 2 x #4	50	85	31	6.5 / 11
28-12	28	12 x #16	56	85	36	3.5
28-19	28	19 x #16	56	85	36	3.2
32-07	32	7 x #8	62	85	43	8.0
32-19	32	19 x #12	62	85	43	4.0
36-03	36	3 x #4	68	101	48	12.0
36-04	36	4 x #4	68	101	48	12.0
36-27	36	27 x #16	68	85	48	3.5
36-48	36	48 x #16	68	85	48	3.2

#### PLUG, TERMINATION WITH THREAD & PG ADAPTER ASGTC6L-M / PGXX: FOR CABLE PROTECTION TUBE

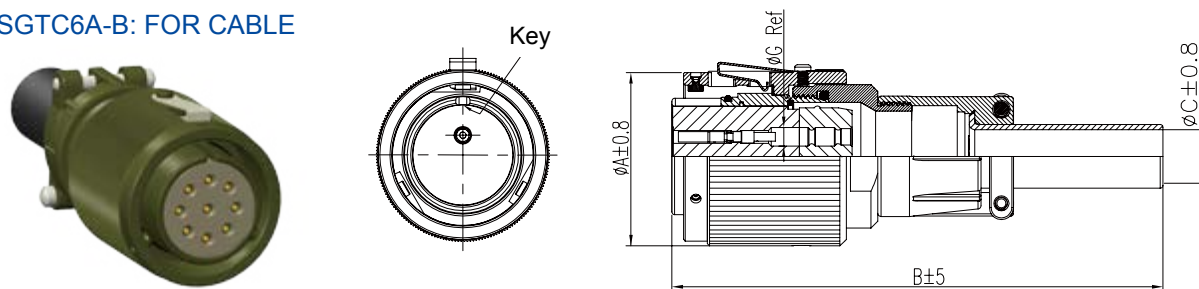


Insert arrangement	Shell size	Contact number	$\phi A \pm 0.8$	$B \pm 5$	M	$\phi G \text{ Ref.}$
20-01	20	1 x #8	45	71	PG9	8.0
20-07	20	7 x #16	45	71	M25	5.5
24-03	24	3 x #8	50	71	M25	8.0
24-07	24	7 x #12	50	71	M25	6.5
24-09	24	9 x #16	50	71	M25	5.5
24-M2	24	8 x #16 + 2 x #8	50	71	M25	5.5 / 8.0
24-M3	24	9 x #12	50	71	M25	6.5
24-M4	24	4 x #8	50	71	M25	8.0
24-M5	24	3 x #12 + 2 x #4	50	71	M25	6.5 / 11
28-12	28	12 x #16	56	71	M25	4.6
28-19	28	19 x #16	56	71	M25	4.6
32-07	32	7 x #8	62	71	M32	8.0
36-27	36	27 x #16	68	71	PG29	5.5
36-48	36	48 x #16	68	71	PG36	4.5

## NON WATERPROOF PLUG

### STRAIGHT PLUG (FEMALE CONTACT)

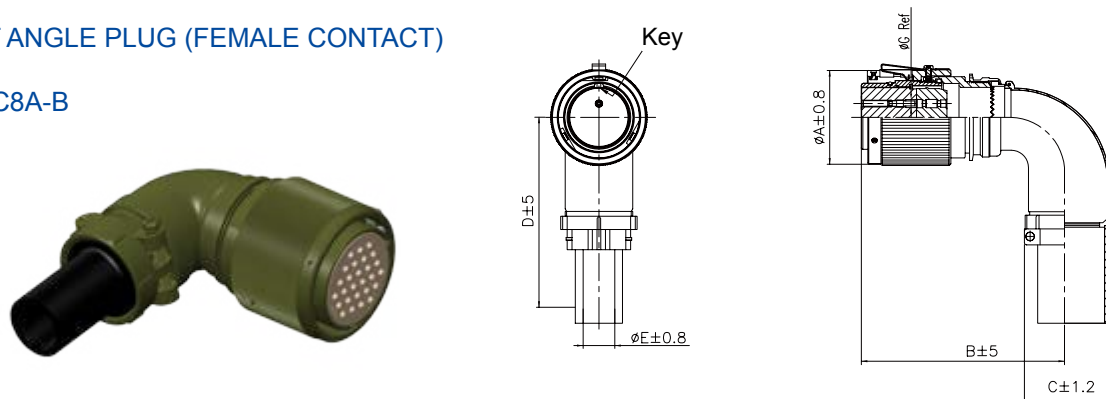
#### ASGTC6A-B: FOR CABLE



Insert arrangement	Shell size	Contact number	$\Phi A \pm 0.8$	$B \pm 5$	$\Phi C \pm 0.8$	$\Phi G \text{ Ref.}$
20-01	20	1 x #8	45	130	16	8.0
20-03	20	3 x #12	45	130	16	6.5
20-05	20	5 x #16	45	130	16	4.6
20-07	20	7 x #16	45	130	16	4.6
24-03	24	3 x #8	50	145	16	8.0
24-07	24	7 x #12	50	145	16	6.5
24-09	24	9 x #16	50	145	16	4.6
24-M2	24	8 x #16 + 2 x #8	50	145	19	4.6 / 8.0
24-M3	24	9 x #12	50	145	19	6.5
24-M4	24	4 x #8	66	145	19	8.0
24-M5	24	3 x #12 + 2 x #4	66	145	19	6.5 / 11
28-12	28	12 x #16	56	130	19	4.6
28-19	28	19 x #16	56	130	19	4.6
32-07	32	7 x #8	62	130	24	8.0
32-19	32	19 x #12	62	130	24	6.5
36-27	36	27 x #16	68	135	24	4.6
36-48	36	48 x #16	68	135	32	4.6

### RIGHT ANGLE PLUG (FEMALE CONTACT)

#### ASGTC8A-B



Insert arrangement	Shell size	Contact number	$\Phi A \pm 0.8$	$B \pm 5$	$C \pm 1.2$	$D \pm 5$	$\Phi E \pm 0.8$	$\Phi G \text{ Ref.}$
20-01	20	1 x #8	45	130	37	98	16	8.0
20-03	20	3 x #12	45	130	37	98	16	6.5
20-05	20	5 x #16	45	130	37	98	16	4.6
20-07	20	7 x #16	45	130	37	98	16	4.6
24-03	24	3 x #8	50	145	37	98	16	8.0
24-07	24	7 x #12	50	145	37	98	16	6.5
24-09	24	9 x #16	50	145	37	98	16	4.6
24-M2	24	8 x #16 + 2 x #8	50	145	43	98	19	4.6 / 8.0
24-M3	24	9 x #12	50	145	43	98	19	6.5
24-M4	24	4 x #8	66	145	43	98	19	8.0
24-M5	24	3 x #12 + 2 x #4	66	145	43	98	19	6.5 / 11
28-12	28	12 x #16	56	130	43	100	19	4.6
28-19	28	19 x #16	56	130	43	100	19	4.6
32-07	32	7 x #8	62	130	51	100	24	8.0
32-19	32	19 x #12	62	130	51	100	24	6.5
36-27	36	27 x #16	68	135	57	102	24	4.6
36-48	36	48 x #16	68	135	57	102	32	4.6



# TYPICAL MATING GUIDE

## TYPICAL MATING GUIDE

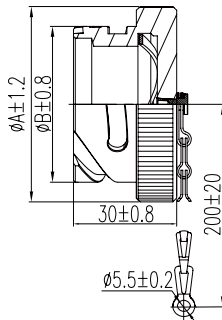
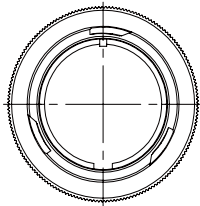
RECEPTACLE (MALE CONTACT)		PLUG (FEMALE CONTACT)	
PIN CONTACT	RECEPTACLE (FOR CABLE) ASGTC0L-D	PLUG (FOR CABLE) ASGTC6L-D	SOCKET CONTACT
			
RECEPTACLE PROTECTION CAP ASGTC25043-LC	CABLE MOUNTED RECEPTACLE (FOR WIRE) ASGTC0L-LF	PLUG (FOR WIRE) ASGTC6L-LF	PLUG PROTECTION CAP ASGTC25042-LC
			
SEALING PLUGS	WALL / BOX MOUNTED RECEPTACLE ASGTC2L	SEALING PLUGS	
			

## HOW TO ORDER: PROTECTION CAP

	<b>ASGTC</b>	<b>25043</b>	<b>20</b>	<b>LC</b>	<b>/</b>
<b>ASGTC</b> : With self-locking system					
<b>Connector type:</b>					
<b>25042</b> : Plug protection cap					
<b>25043</b> : Receptacle protection cap					
<b>Shell size</b> : 20, 24, 28, 32, 36					
<b>Shell plating:</b>					
<b>Omit</b> : Olive drab zinc					
<b>BA</b> : Black Anodized					
<b>GA</b> : Green Anodized					
<b>HA</b> : Hard Anodized					
<b>BZ</b> : Black zinc					
<b>NI</b> : Nickel					

### PLUG PROTECTION CAP

ASGTC25042

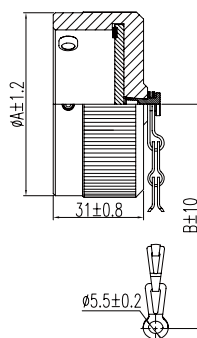
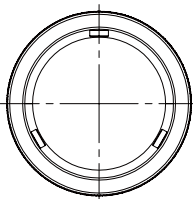


Part number / Size

For ASGTC Plug	Shell size	$\phi A \pm 1.2$	$\phi B \pm 0.5$
ASGTC25042-20LC	20	45	35
ASGTC25042-24LC	24	52	41.5
ASGTC25042-28LC	28	56	46
ASGTC25042-32LC	32	62	53
ASGTC25042-36LC	36	68	58

### RECEPTACLE PROTECTION CAP

ASGTC25043



Part number / Size

For ASGTC Receptacle	Shell size	$\phi A \pm 1.2$	$\phi B \pm 0.5$
ASGTC25043-20LC	20	45	115
ASGTC25043-24LC	24	50	130
ASGTC25043-28LC	28	56	130
ASGTC25043-32LC	32	62	130
ASGTC25043-36LC	36	68	130

# CONTACTS

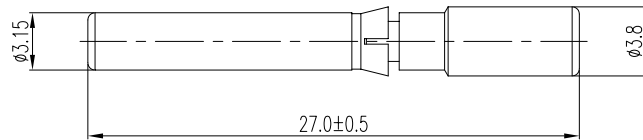
BLIND CONTACTS

SEALING PLUGS

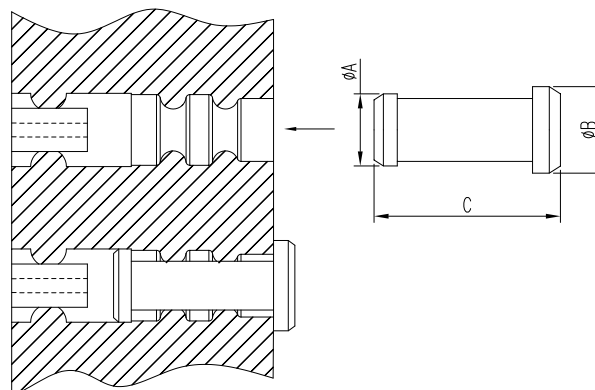
CONTACTS

#16 BLIND CONTACTS P/N: C420004014

MATERIAL: STEEL / ZINC PLATED

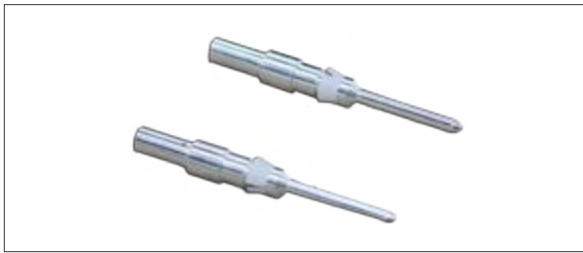


## SEALING PLUGS



Contact size	Part number	Color	ΦA	ΦB	C
#16	C220004202	Black	5	6	16.5
#12	C220004128	Black	4.7	6.5	17.5
#8	C220004129	Black	6	7	15

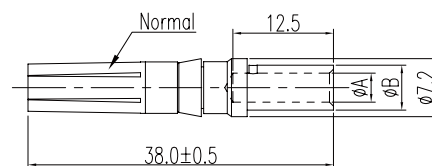
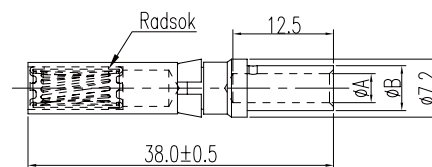
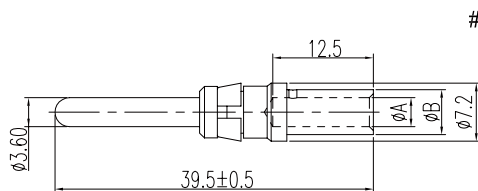
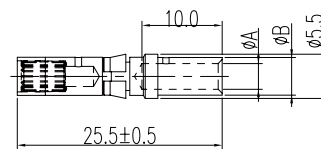
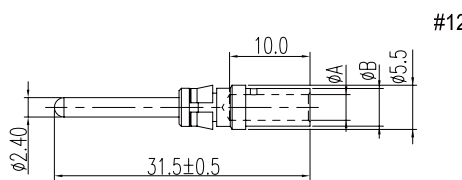
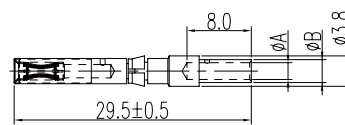
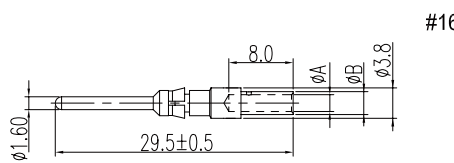
## CONTACTS



**PIN**



**SOCKET**



Contact size	Part number		Plating	Wire size	Tools		
	Pin	Socket			Crimping	Insertion	Extraction
#16	C42000400500(G)	C52000409500(G)	Silver(Gold)	1.0 to 1.5mm <sup>2</sup>	M22520/1-01	AS-GTC-I-16	AS-GTC-R-16
	C42000400501(G)	C52000409501(G)	Silver(Gold)	0.5 to 1.0mm <sup>2</sup>			
	C42000400502(G)	C52000409502(G)	Silver(Gold)	1.5 to 2.0mm <sup>2</sup>			
#12	C420003315	C420003316	Silver	1.5 to 2.0mm <sup>2</sup>	M317	AS-GTC-I-12	AS-GTC-R-12
	C420003314	C420003309	Silver	2.5 to 4.0mm <sup>2</sup>			
#8 (Radsok)	C420004103	C420004104	Silver	5.0 to 7.0mm <sup>2</sup>	APHWA23KIT	AS-GTC-I-8	AS-GTC-R-8
	C420004112	C420004113	Silver	8.0 to 10mm <sup>2</sup>			
#8 (Normal)	C420004114	C420004115	Silver	2.5 to 4.0mm <sup>2</sup>			
	C420004116	C420004117	Silver	6.0 to 8.0mm <sup>2</sup>			
	C420004112	C420004111	Silver	8.0 to 10mm <sup>2</sup>			

# TOOLS

## TOOLS

Contact size	Cable section	Crimping	Insertion	Extraction	Force gauge
#16	0.5 to 2mm <sup>2</sup>	M22520/1-01 (Manual)	ASGTC-I-16	ASGTC-R-16	ASGTC-TM-16
#12	2.5 to 4mm <sup>2</sup>	M317 (Manual)	ASGTC-I-12	ASGTC-R-12	ASGTC-TM-12
#8	2.5 to 10mm <sup>2</sup>	APHWA23KIT (Pneumatic)	ASGTC-I-8	ASGTC-R-8	ASGTC-TM-8

#16 Crimping tool M22520/1-01	#16 Insertion tool ASGTC-I-16	#16 Extraction tool ASGTC-R-16	#16 Force gauge ASGTC-TM-16
			
#12 Crimping tool: M317 (Localizer: TP805)	#12 Insertion tool ASGTC-I-12	#12 Extraction tool ASGTC-R-12	#12 Force gauge ASGTC-TM-12
			
#8 Crimping tool APHWA23KIT	#8 Insertion tool ASGTC-I-8	#18 Extraction tool ASGTC-R-8	#8 Force gauge ASGTC-TM-8
			

## WIRING INSTRUCTION



Tools		For contacts P/N	Section of conductor	A size
Crimping tool	Localizer			
M22520/1-01	UH2-5	C420004005XX C420004095XX	0.5 to 2.0mm <sup>2</sup>	6 <sup>+1</sup> <sub>0</sub> mm

1. Cable preparing	4. Open the handle of crimp tools	7. Clench the tools handle until crimp well
2. Select the right localizer, screw into the tools	5. Put the contact into the localizer	8. Relax the handle, as below shows the status of the wire
3. Select the right size	6. Put the stripped wire into the tools	

# CONNECTOR MOUNTED INSTRUCTIONS

## 1. Insert pin



## 2. Remove pin



## 3. Connector mounting



Fix and wrest the screw



ASGTCK Quadrax belongs to ASGTC series, which offers environmental cylindrical reverse bayonet coupling connectors.

Its rugged housing (IP67) is resistant to high temperatures, vibrations and shocks, providing a high performance, reliable connector.

Supporting a variety of data types, Amphenol ASGTC Quadrax circular bayonet databus connector allows designers to initiate data transfers from Ethernet, MVB, WTB, and video lines, according to VG95234 within the same

connector. Designed for railway and mass transit industry, this connector provides a rated current up to 13A and a 1000V (AC) max high-voltage.

ASGTCK Quadrax can use different kinds of cables including CAT 5E, CAT 6A, CAT 7, transmission speed up to 10 Gigabit/s (according to TIA568C.2 / ISO11801 standard), widely use in railway and mass transit industry, factory automation, servers and other devices. For any special request or custom order, please contact us.



Modular, secure and reliable reverse bayonet connection.



Different kinds of keyway offering different alternate positions.

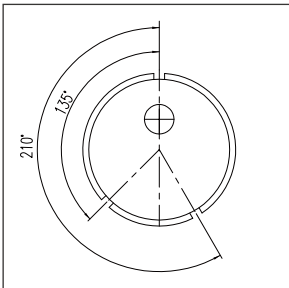


High safety & speed in data transmission for MVB, WTB, Ethernet...

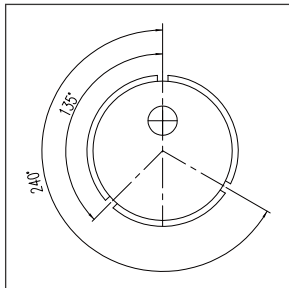


Gold plated contacts, which provide a 360 degrees of EMI shielding.

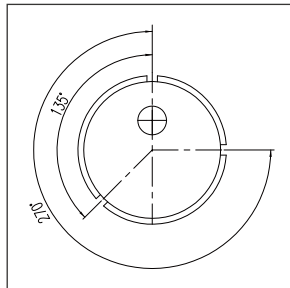
ALTERNATE POSITION



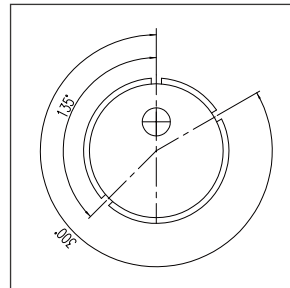
W: 210°



X: 240°



Y: 270°



Z: 300°



## ASGTCK-Quadrax

- Special safety locking system, durable for high vibration and shocking condition
- Independent quadrax contacts
- EMI/RFI shielding
- Resistant to vibrations and shocks
- Safe and reliable data transmission
- Sealing, IP67



### MECHANICAL

Durability	≥ 500 mating cycles
Connection type	Crimp
Vibration & shock	According to TB2761-1996 / IEC 61373-1999 (GB/T 21563-2008) Category 2
Contact retention force NFF 61030	#16: 70N #20: 70N #22: 44N

### ENVIRONMENTAL

Temperature range	-55°C to 125°C
Humidity	90% to 95% (40±2°C)
Sealing	IP67
Salt spray	96h

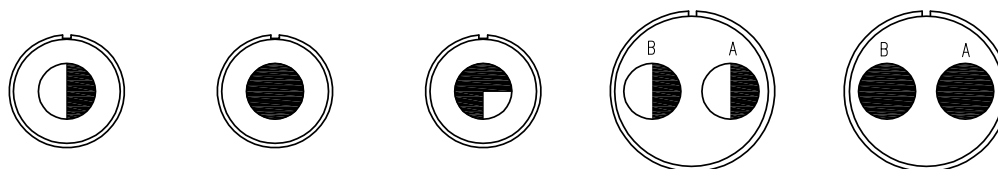
### MATERIAL

Shell	Alu. alloy, zinc plating
Quadrax pin	Copper alloy, silver plating
Inserts	Thermoplastic
Contact	Copper alloy, gold plating
Sealing gasket	Silicon rubber

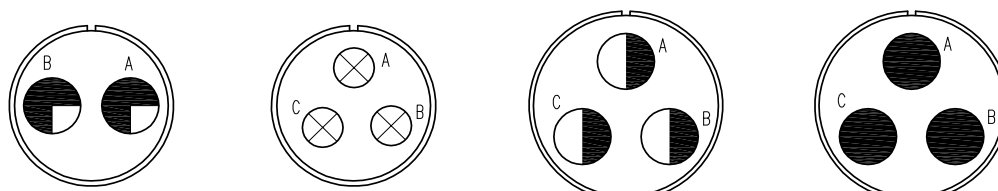
### ELECTRICAL

	Q4-contact	Q8-contact	Q4S-contact	QG (Quadrax Gigabit) (Gigabit Module)
Contact number	4 x #16	8 x #20	4 x #20	8 x #22
Rated current	13A	7.5A	7.5A	5A
Rated voltage	AC 125V (r.m.s)	AC 50V (r.m.s)	AC 50V (r.m.s)	AC 50V (r.m.s)
Withstanding voltage	AC 1500V (r.m.s)	AC 1000V (r.m.s)	AC 1000V (r.m.s)	AC 800V (r.m.s)
Contact resistance	≤ 2.5mΩ	≤ 3.0mΩ	≤ 3.0mΩ	≤ 5.0mΩ
Contact resistance		≥ 2000MΩ		≥ 100MΩ
Insertion loss		≤ 0.4dB@100MHz		≤ 0.3dB@250MHz
Return loss		≤ 20dB@100MHz		≤ 16dB@250MHz
Crosstalk loss		≥ 43dB@100MHz		≥ 46dB@250MHz
Transmission speed		1GB/S		10 GB/S
Category		Cat.5e		Cat.6a
Temperature rise	≤ 60K			

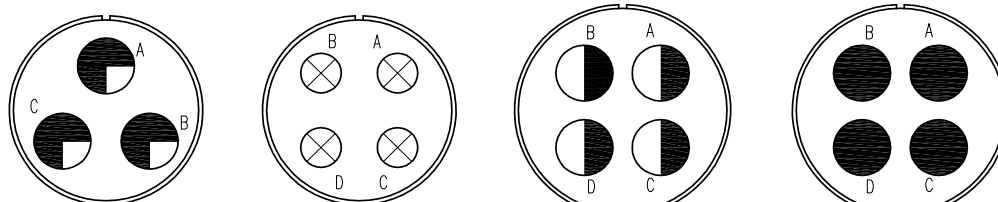
# INSERT ARRANGEMENT



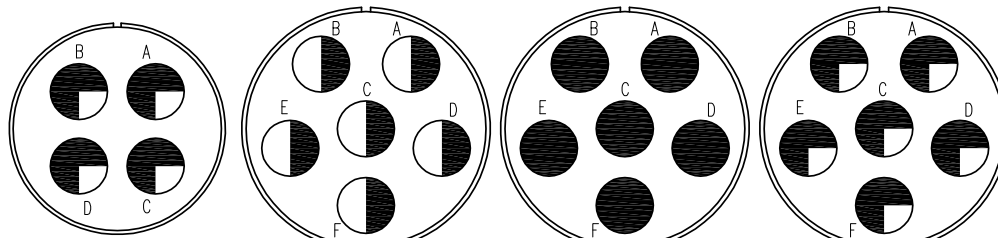
Insert arrangement	20-M1	20-M1	20-M1	28-M2	28-M2
Rated voltage	125V	125V	50V	125V	125V
Rated current	7.5A	7.5A	5A	7.5A	7.5A
Module quantity	1	1	1	2	2
Module type	Q4	Q8	QG	Q4	Q8
Category	CAT 5E	CAT 5E	CAT 6A & CAT 7	CAT 5E	CAT 5E
Transmission speed	1 Gigabit/s	1 Gigabit/s	10 Gigabit/s	1 Gigabit/s	1 Gigabit/s



Insert arrangement	28-M2	28-M3	32-M3	32-M3
Rated voltage	50V	50V	125V	125V
Rated current	5A	7.5A	7.5A	7.5A
Module quantity	2	3	3	3
Module type	QG	Q4S	Q4	Q8
Category	CAT 6A & CAT 7	CAT 5E	CAT 5E	CAT 5E
Transmission speed	10 Gigabit/s	1 Gigabit/s	1 Gigabit/s	1 Gigabit/s



Insert arrangement	32-M3	32-M4	36-M4	36-M4
Rated voltage	50V	50V	125V	125V
Rated current	5A	7.5A	7.5A	7.5A
Module quantity	3	4	4	4
Module type	QG	Q4S	Q4	Q8
Category	CAT 6A & CAT 7	CAT 5E	CAT 5E	CAT 5E
Transmission speed	10 Gigabit/s	1 Gigabit/s	1 Gigabit/s	1 Gigabit/s



Insert arrangement	32-M4	40-M6	40-M6	40-M6
Rated voltage	50V	125V	125V	50V
Rated current	5A	7.5A	7.5A	5A
Module quantity	4	6	6	6
Module type	QG	Q4	Q8	QG
Category	CAT 6A & CAT 7	CAT 5E	CAT 5E	CAT 6A & CAT 7
Transmission speed	10 Gigabit/s	1 Gigabit/s	1 Gigabit/s	10 Gigabit/s

# MODULES & CONNECTOR

Available modules: Q4/Q4S/Q8/QG



QG Module connector



QG-CONTACT



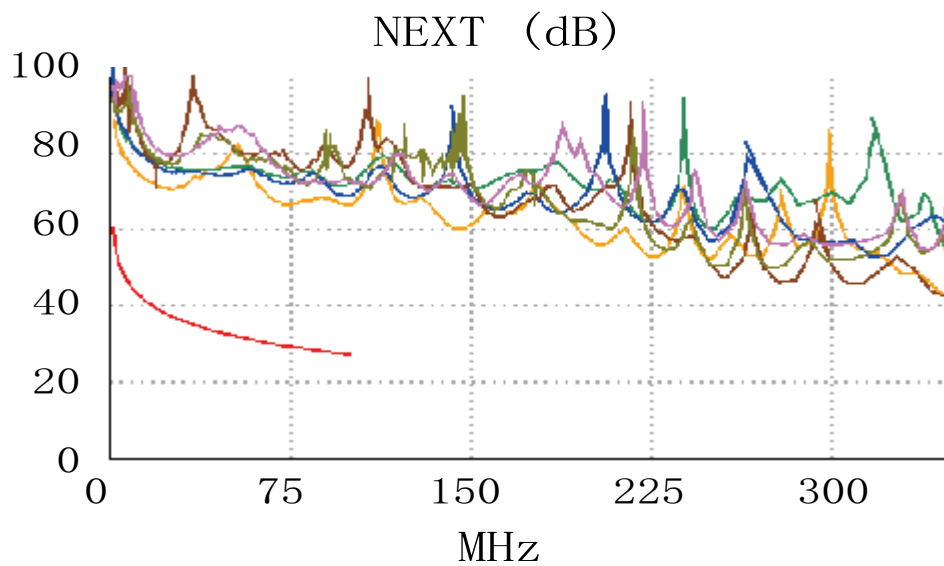
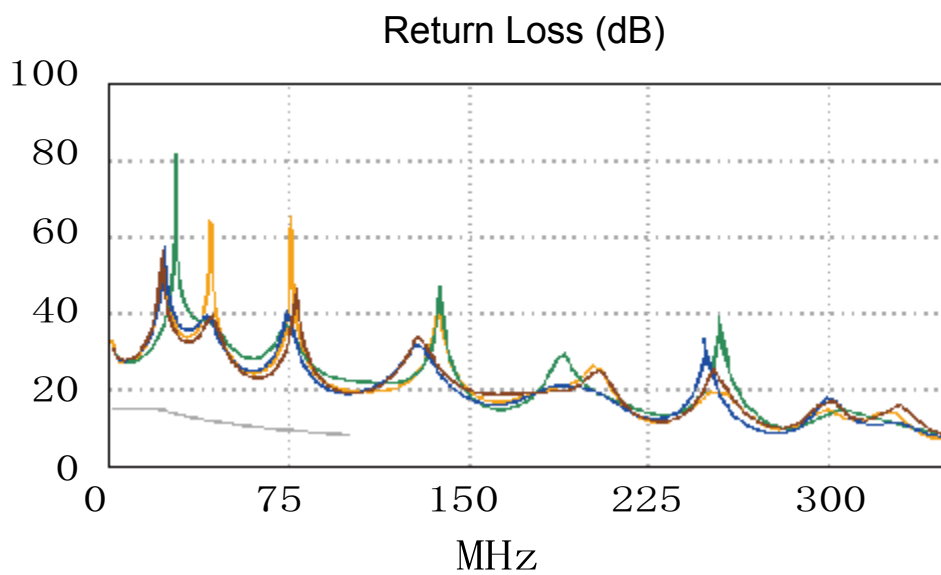
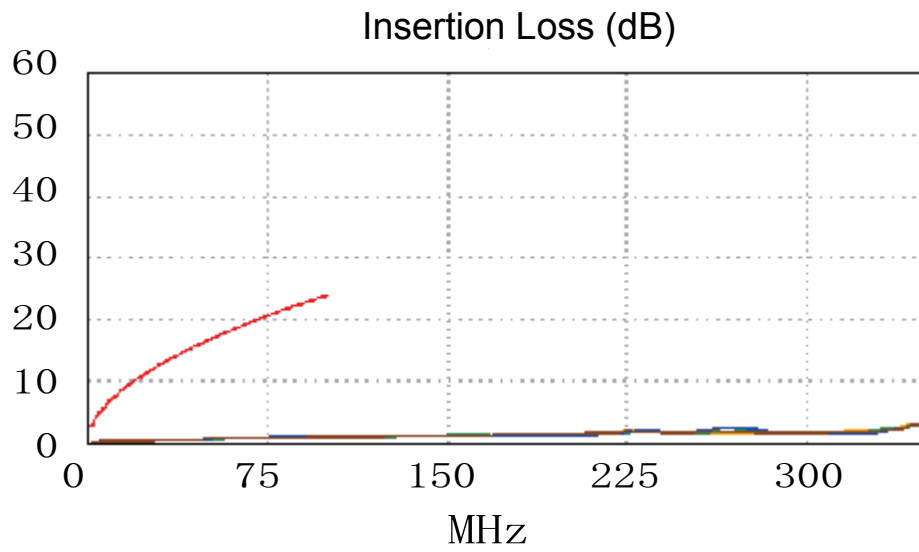
Q4 Module connector



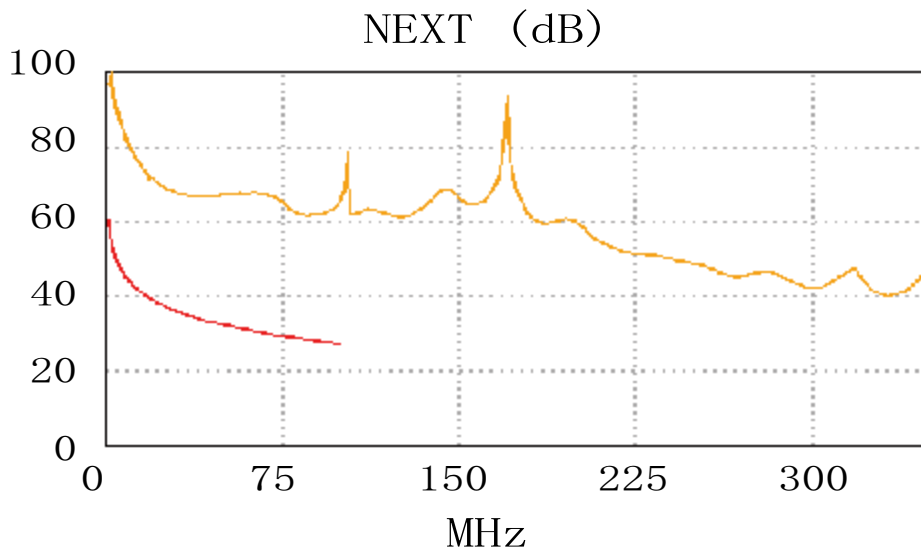
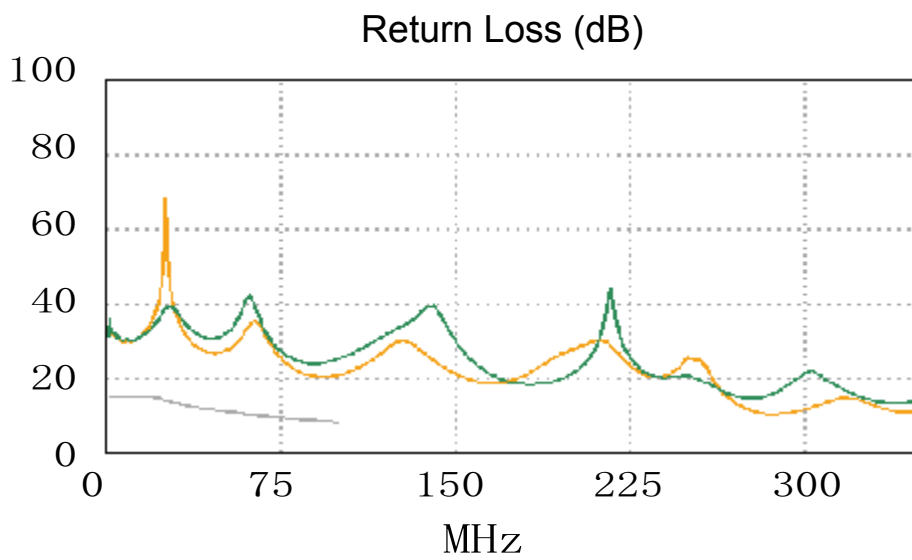
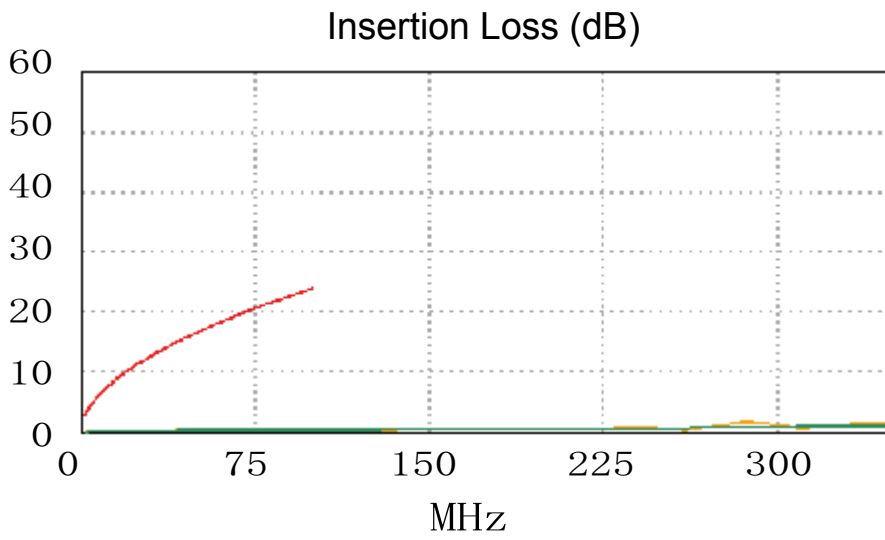
Q4-CONTACT



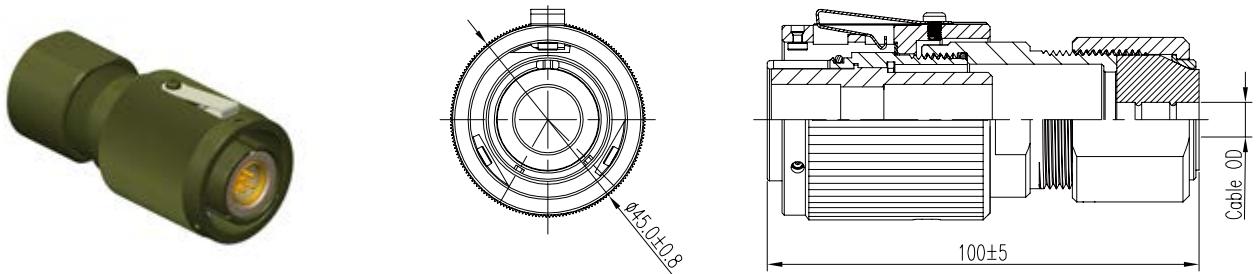
Measured drawing



Measured drawing

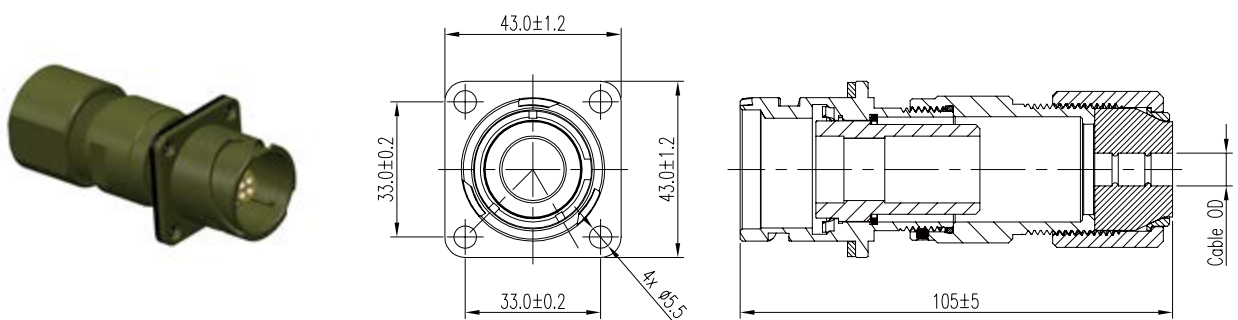


ASGTCK6L-D, STRAIGHT PLUG, NUT TERMINATION  
FOR CABLE



Part number	Insert arrangement	Shell size	Q-contact	Cable OD
ASGTCK6L 20M1 PGC D8 LC	20-M1	20	1 x Q4 / Q8 / Gigabit (female)	Φ6 to Φ8

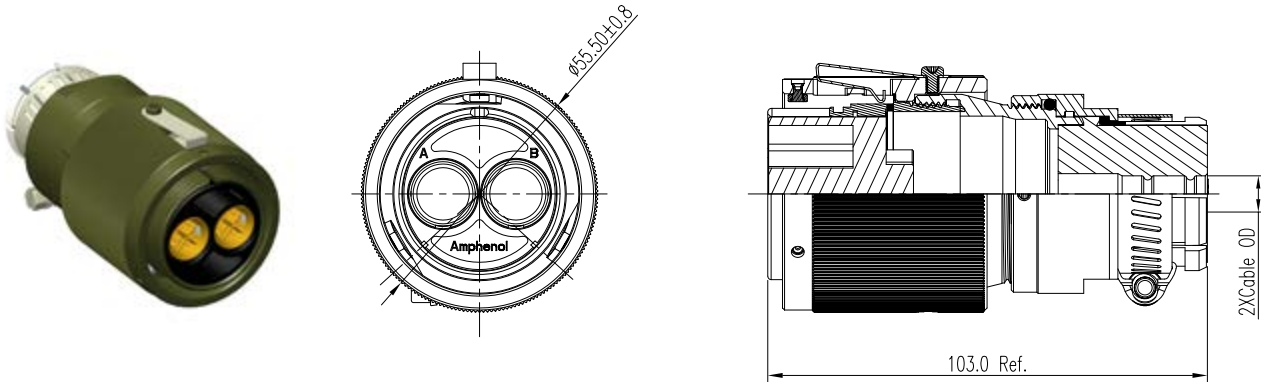
ASGTCK1L-D, RECEPTACLE, NUT TERMINATION  
FOR CABLE



Part number	Insert arrangement	Shell size	Q-contact	Cable OD
ASGTCK1L 20M1 SGC D8 LC	20-M1	20	1 x Q4 / Q8 / QG (male)	Φ6 to Φ8

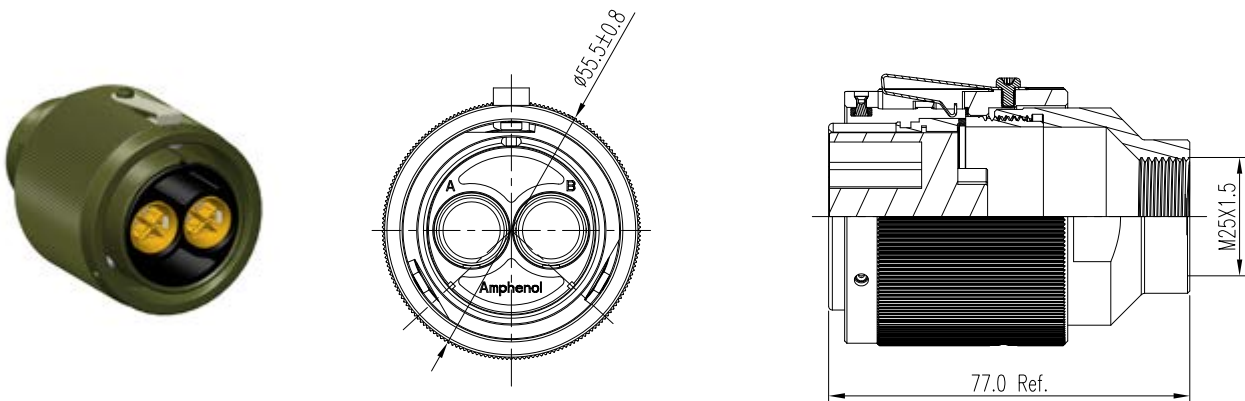
# ASGTCK 28-M2

## ASGTCK6L-LF, STRAIGHT PLUG, HOOP TERMINATION FOR 2PCS CABLE



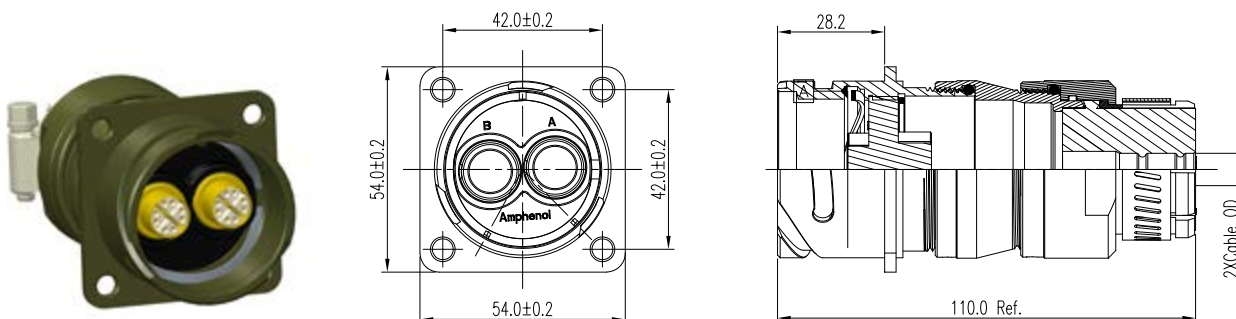
Part number	Insert arrangement	Shell size	Q-contact	Cable OD
ASGTCK6L 28M2 PGC 2D7 LF LC	28-M2	28	2 x Q4/Q8/QG (female)	Φ6 to Φ8

## ASGTC6L-M, STRAIGHT PLUG, TERMINATION WITH THREAD FOR 2PCS CABLE



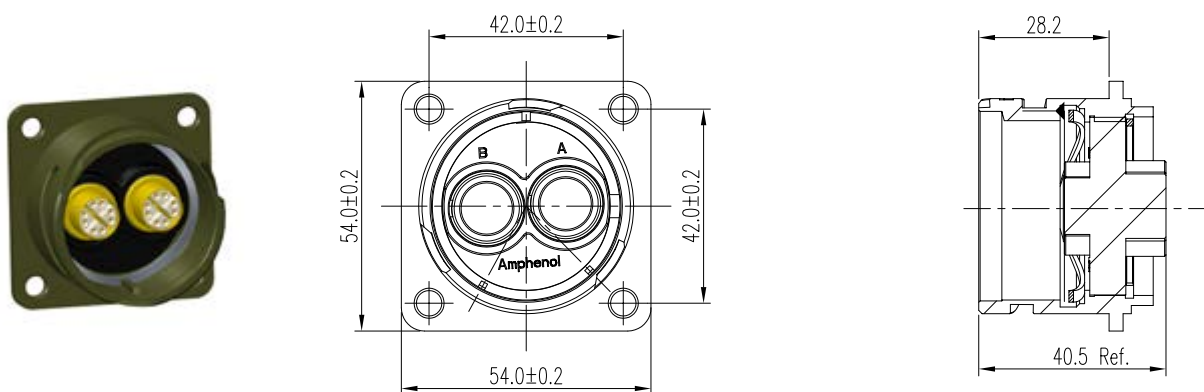
Part number	Insert arrangement	Shell size	Q-contact
ASGTCK6L 28M2 PGC M25 LC	28-M2	28	2 x Q4Q4/Q8/QG (female)

ASGTCK1L-LF, RECEPTACLE, HOOP TERMINATION FOR 2PCS CABLE



Part number	Insert arrangement	Shell size	Q-contact	Cable OD
ASGTCK1L 28M2 SGC 2D7 LF LC	28-M2	28	2 x Q4/Q8/QG (male)	Φ6 to Φ8

ASGTCK3A, BOX MOUNTED RECEPTACLE

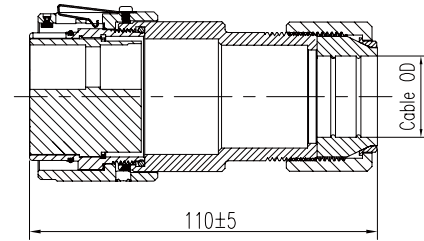
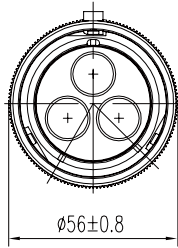


Part number	Insert arrangement	Shell size	Q-contact
ASGTCK3A 28M2 SGC LC	28-M2	28	2 x Q4/Q8/QG (male)



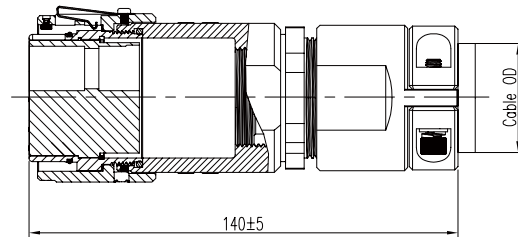
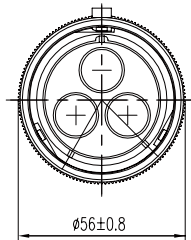
ASGTCK 28-M3  
3 x Q4S-contact

ASGTCK6L-D, STRAIGHT PLUG, NUT TERMINATION  
FOR CABLE



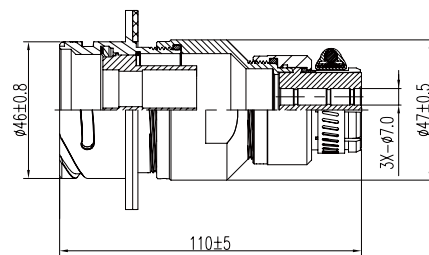
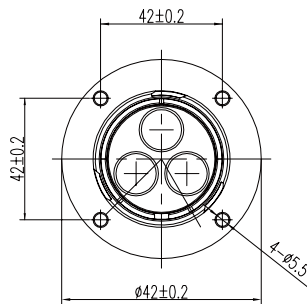
Part number	Insert arrangement	Shell size	Q-contact	Cable OD
ASGTCK6L 28M3 SGC D24 LC	28-M3	28	3 x Q4S (female)	$\varnothing 20$ to $\varnothing 24$

ASGTCK6L-A, STRAIGHT PLUG, CABLE CLAMP TERMINATION  
FOR CABLE



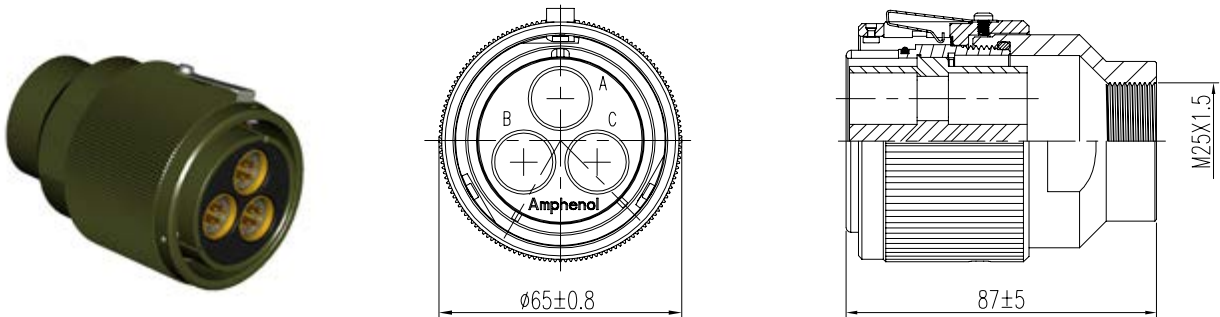
Part number	Insert arrangement	Shell size	Q-contact	Cable OD
ASGTCK6L 28M3 SGC A24 LC	28-M3	28	3 x Q4S (female)	$\varnothing 20$ to $\varnothing 24$

ASGTCK0L-LF, RECEPTACLE, HOOP TERMINATION  
FOR 3PCS CABLE



Part number	Insert arrangement	Shell size	Q-contact	Cable OD
ASGTCK0L 28M3 PGC 3D7 LF LC	28-M3	28	3 x Q4S (male)	3 x $\varnothing 5$ to $\varnothing 7$

ASGTCK6L-M, PLUG, TERMINATION WITH THREAD  
FOR M25 ADAPTER

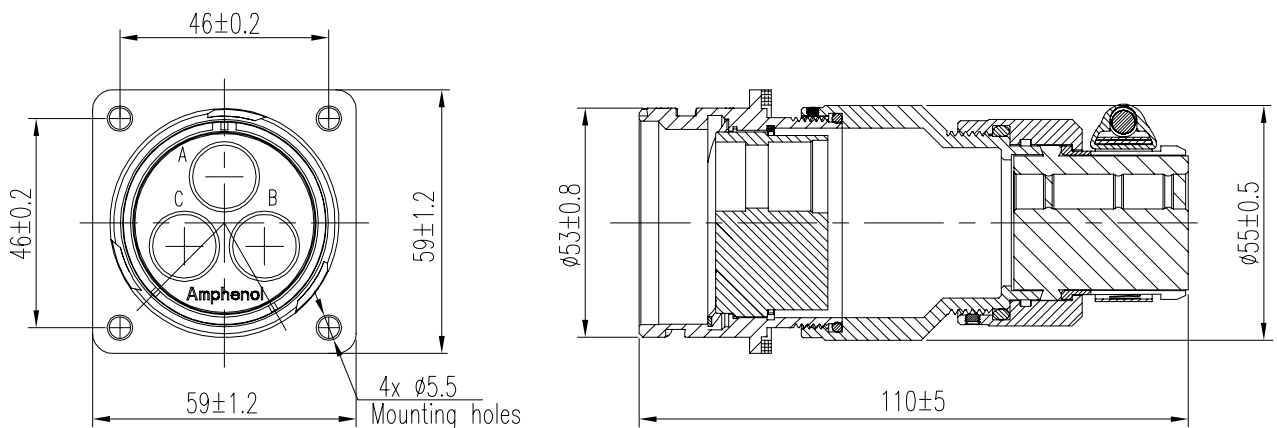


Part number	Insert arrangement	Shell size	Q-contact
ASGTCK6L 32M3 PGC M25 LC	32-M3	32	3 x Q4 / Q8 /QG (female)

ASGTCK1L-LF, RECEPTACLE, HOOP TERMINATION  
FOR 3PCS CABLE

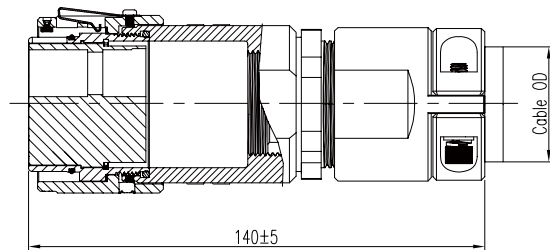
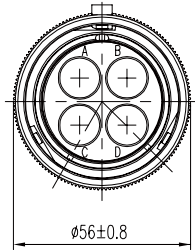


Part number	Insert arrangement	Shell size	Q-contact	Cable OD
ASGTCK1L 32M3 SGC 3D7 LF LC	32-M3	32	3 x Q4 / Q8/QG (male)	Φ6 to Φ8



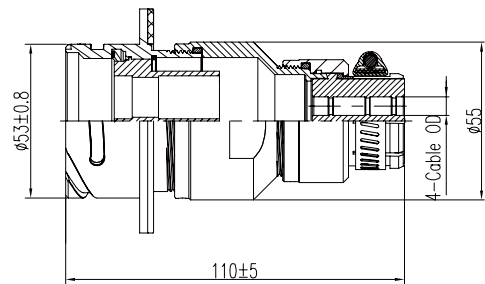
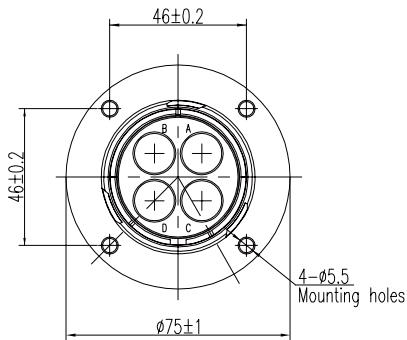
# ASGTCK 32-M4 4 x Q4S-contact

## ASGTCK6L-A, STRAIGHT PLUG, CABLE CLAMP TERMINATION FOR CABLE



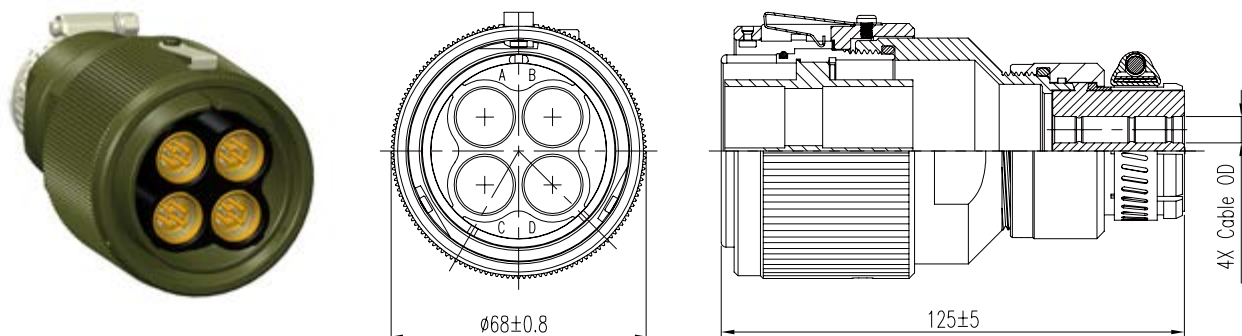
Part number	Insert arrangement	Shell size	Q-contact	Cable OD
ASGTCK6L 32M4 SGC A24 LC	32-M4	32	4 x Q4S (female)	$\varnothing 20$ to $\varnothing 24$

## ASGTCK0L-LF, RECEPTACLE, HOOP TERMINATION FOR 4PCS CABLE



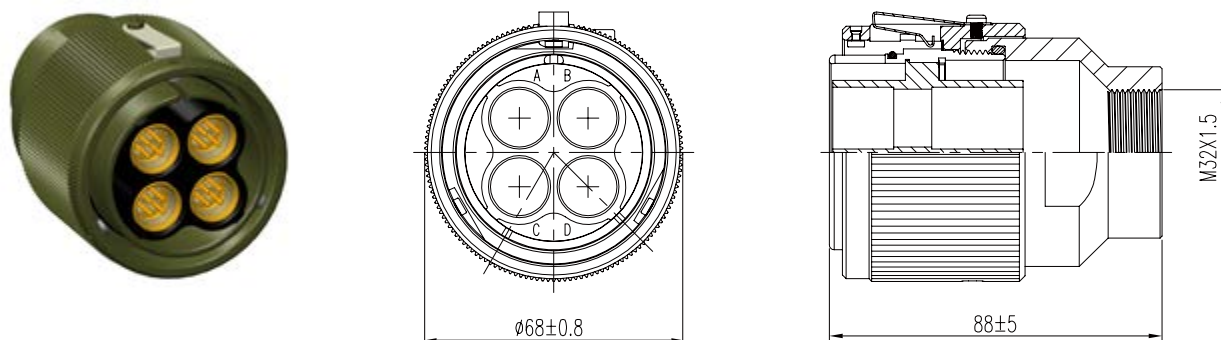
Part number	Insert arrangement	Shell size	Q-contact	Cable OD
ASGTCK0L 32M4 PGC 4D7 LF LC	32-M4	32	4 x Q4S (male)	$\varnothing 5$ to $\varnothing 7$

ASGTCK6L-LF, STRAIGHT PLUG, HOOP TERMINATION  
FOR 4PCS CABLE



Part number	Insert arrangement	Shell size	Q-contact	Cable OD
ASGTCK6L 36M4 PGC 4D7 LF LC	36-M4	36	4 x Q4 / Q8/QG (female)	4 x $\Phi 6$ to $\Phi 8$

ASGTCK6L-M, PLUG, TERMINATION WITH THREAD  
FOR M32 ADAPTER



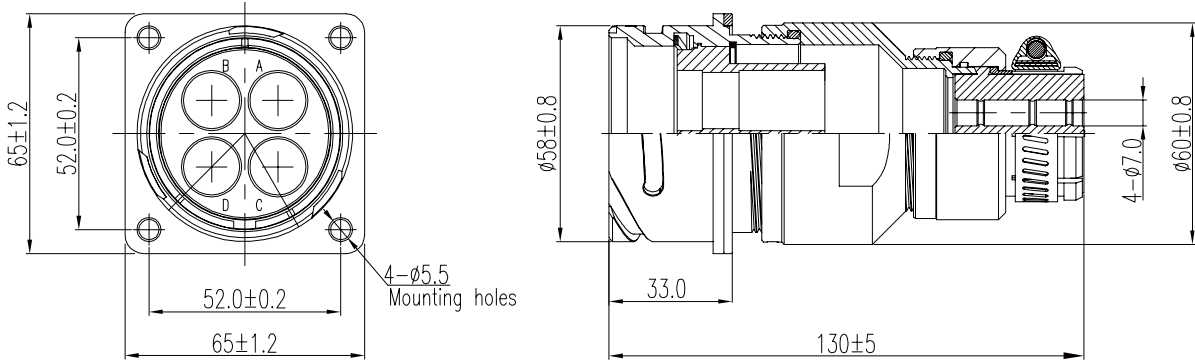
Part number	Insert arrangement	Shell size	Q-contact
ASGTCK6L 36M4 PGC M32 LC	36-M4	36	4 x Q4 / Q8/QG (female)

# ASGTCK 36-M4 4 x Q-contact

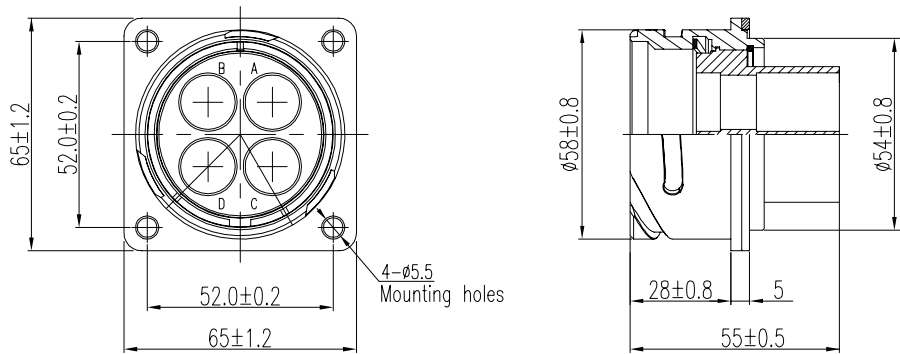
## ASGTCK1L-LF, RECEPTACLE, HOOP TERMINATION FOR 4PCS CABLE



Part number	Insert arrangement	Shell size	Q-contact	Cable OD
ASGTCK1L 36M4 PGC 4D7 LC	36-M4	36	4 x Q4 / Q8 / QG (male)	4 x $\Phi 6$ to $\Phi 8$

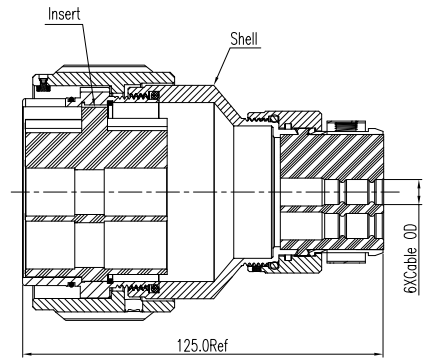
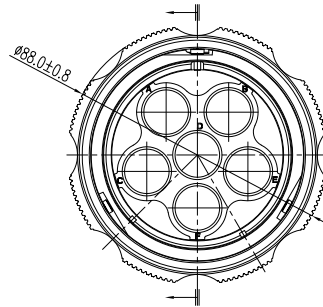


## ASGTCK3A, BOX MOUNTED RECEPTACLE



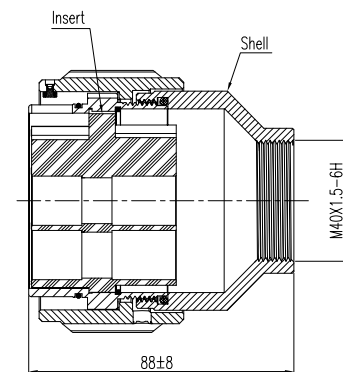
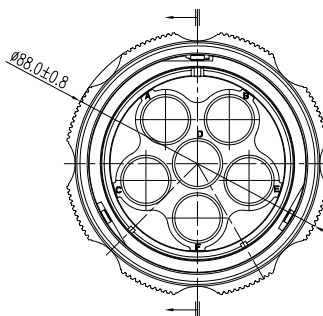
Part number	Insert arrangement	Shell size	Q-contact
ASGTCK3A 36M4 PGC LC	36-M4	36	4 x Q4 / Q8 / QG (male)

ASGTCK6L-LF, STRAIGHT PLUG, HOOP TERMINATION  
FOR 6PCS CABLE



Part number	Insert arrangement	Shell size	Q-contact	Cable OD
ASGTCK6L 40M6 PGC 6D7 LF LC	40-M6	40	6 x Q4 / Q8/QG (female)	6x $\Phi 6$ to $\Phi 8$

ASGTCK6L-M, STRAIGHT PLUG, TERMINATION WITH THREAD  
FOR M40 ADAPTER



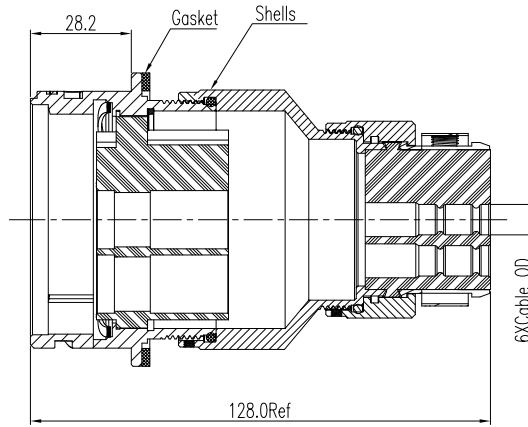
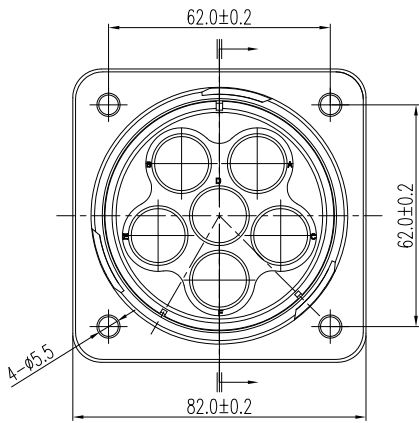
Part number	Insert arrangement	Shell size	Q-contact
ASGTCK6L 40M6 PGC M40 LC	40-M6	40	6 x Q4 / Q8/QG (female)

# ASGTCK 40-M6 6 x Q-contact

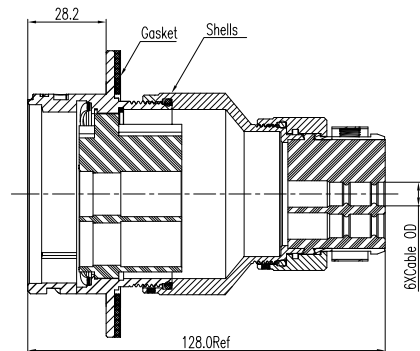
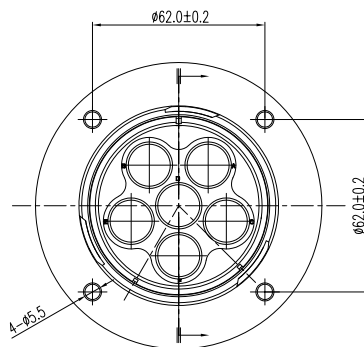
## ASGTCK1L-LF, RECEPTACLE, HOOP TERMINATION FOR 6PCS CABLE



Part number	Insert arrangement	Shell size	Q-contact	Cable OD
ASGTCK1L 40M6 SGC 6D7 LC	40-M6	40	6 x Q4 / Q8 / QG (male)	6 x $\Phi 6$ to $\Phi 8$


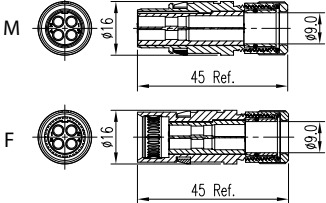

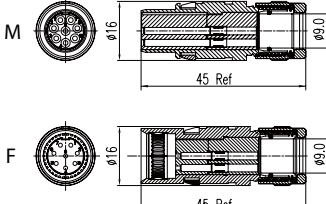

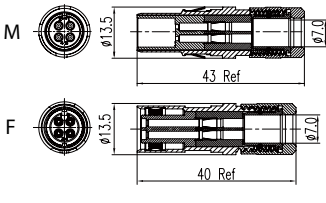

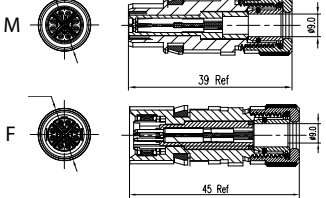


## ASGTCK0L, RECEPTACLE, HOOP TERMINATION







Part number	Insert arrangement	Shell size	Q-contact	Cable OD
ASGTCK0L 40M6 SGC 6D7 LC	40-M6	40	6 x Q4 / Q8 / QG (male)	6 x $\Phi 6$ to $\Phi 8$

Q-CONTACT

Contact	Drawing	Contact number	Part number	Extraction tool
		4 x #16 Socket	ASGTC MQ416 SC LC	ASGTC-R-Q
		4 x #16 Pin	ASGTC FQ416 PC LC	ASGTC-R-Q
		8 x #20 Socket	ASGTC MQ 820 SC LC	ASGTC-R-Q
		8 x #20 Pin	ASGTC FQ 820 PC LC	ASGTC-R-Q
		4 x #20 Pin	ASGTC FQS 420 SC LC	ASGTC-R-QS
		4 x #20 Socket	ASGTC MQS 420 PC LC	ASGTC-R-QS
		8 x #22 Pin	ASGTC MQ 822 SC	ASGTC-R-Q
		8 x #22 Socket	ASGTC FQ 822 SC	ASGTC-R-Q



## PIN & SOCKET

Contact	Part number		Wire size	Plating	Tools	
	Pin	Socket			Crimping	Extraction
#16 contact for Q4 	ASRC16PC001AU	ASRC16SC001AU	0.6 to 1.5 mm <sup>2</sup>	Gold	M22520/1-01	ASGTC-R-16S
	ASRC16PC002AU	ASRC16SC002AU	0.3 to 0.6 mm <sup>2</sup>	Gold	M22520/1-01	ASGTC-R-16S
#20 contact for Q8 	C42000409801	C42000409901	22 to 26 AWG	Gold	M22520/2-01	M81969/1-02
	C42000409804	C42000409904	20 AWG	Gold	M22520/2-01	M81969/1-02
#20 contact for Q45 	C420004821	C420004820	0.3 to 0.6 mm <sup>2</sup>	Gold	M22520/2-01	M81969/1-02
#22 contact for QG 	C42000409806	C42000409906	0.13 to 0.32 mm <sup>2</sup>	Gold	M22520/2-01	—

<p>Q-contact Extraction tool ASGTC-R-Q</p>	<p>QS Extraction tool ASGTC-R-QS</p>
 <p>A cylindrical extraction tool with a silver metal shaft, a black handle, and a black cap at the end.</p>	 <p>A cylindrical extraction tool with a silver metal shaft, a black handle, and a black cap at the end, similar to the Q-contact tool but with a different internal design.</p>
<p>#16 Extraction tool ASGTC-R-16S</p>	<p>#20 Extraction tool M81969/1-02</p>
 <p>An extraction tool with a black handle and a silver metal shaft that tapers to a fine point.</p>	 <p>An extraction tool with a red and white handle and a silver metal shaft that tapers to a fine point.</p>
<p>#16 Crimping tool M22520/1-01</p>	<p>#20 / #22 Crimping tool M22520/2-01</p>
 <p>A blue crimping tool with a blue handle and a blue die. The die is a small cylindrical component with a central hole.</p>	 <p>A blue crimping tool with a blue handle and a blue die. The die is a small cylindrical component with a central hole, similar to the #16 tool but with a different internal design.</p>

## HVGTC HIGH VOLTAGE REVERSE BAYONET CONNECTOR

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HVGTC Environmental cylindrical reverse coupling connector with self-locking system, which guarantee a fast locking and unlocking. Designed for rail and mass transit, high range of current up to 700A and 3000V max high voltage.



**KEY FEATURES**

- High voltage up to 3000V
- High current up to 700A
- Crimp contacts
- Resistant to vibrations and shocks
- Various of insert arrangement available
- Sealing, IP67

MECHANICAL	
Durability	≥ 500 mating cycles
Vibration & shock	According to TB2761-1996 / IEC 61373-1999 (GB/T 21563-2008) Category 2
ELECTRICAL	
Rated current	100A to 700A
Rated voltage	1000V to 4000V
Dielectric withstand voltage	2Ui+2000V (1 min.)
Insulator resistance	≥ 5000MΩ (DC500V)
Temperature rise	≤ 60K
ENVIRONMENTAL	
Temperature range	-55°C to 125°C
Humidity	90% to 95% (40±2°C)
Sealing	IP67 (DIN EN 60529)
Salt spray	96h (zinc)
Flammability	UL94 V0
MATERIAL	
Shell	Alu.alloy, zinc, nickel or anodic oxidation plating (black or green)
Inserts	Thermoplastic
Contact	Copper alloy, gold or silver plating
Sealing gasket	Silicon rubber

# HOW TO ORDER

HVGTC 6 L 20 01 S C X X / X

HVGTC: With self-locking system  
 HVGTCN: Without self-locking system

**Connector type:**

- 0: Cable mounted receptacle (Circular flange)
- 1: Cable mounted receptacle (Square flange)
- 2: Wall or box mounted receptacle (Circular flange)
- 3: Wall or box mounted receptacle (Square flange)
- 5: Jam nut receptacle
- 6: Straight plug
- 8: R/A plug

**Service class:**

- L: Water proof
- A: Non-watertight

**Shell size:**

20, 32, 36, 48

**Insert arrangement:**

Please refer to page 37 to 45

**Contact type:**

- P: Pin
- S: Socket

**Contact wire type:**

- C: Crimp
- M: Screw

**Contact size:**

- R6: 6mm Radsok
- R8: 8mm Radsok
- R10: 10mm Radsok
- R14: 14mm Radsok
- R16: 16mm Radsok
- R18: 18mm Radsok

**Backshell type:**

- A: Cable clamp without sleeve
- D: Nut
- LF: With hoop

**Cable entry size (ΦA):**

(Backshell type A,D) 35: 35mm<sup>2</sup> Cable size

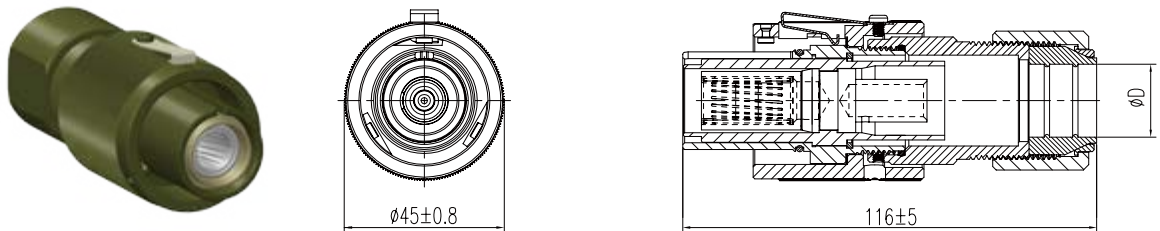
**Shell plating:**

- Omit: Olive drab zinc
- BA: Black Anodized
- GA: Green Anodized
- HA: Hard Anodized
- BZ: Black zinc
- NI: Nickel

HVGTC 2001-R10 500V

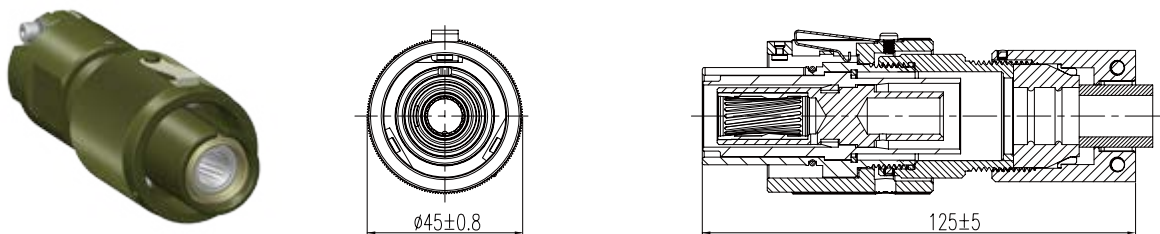
Insert arrangement: 20-01  
 Contact size: 10mm Radsok / Crimp type  
 Max rated current: 250A  
 Max rated voltage: 500V r.m.s

HVGTC6L-2001-D, STRAIGHT PLUG, NUT TERMINATION (FEMALE CONTACT)



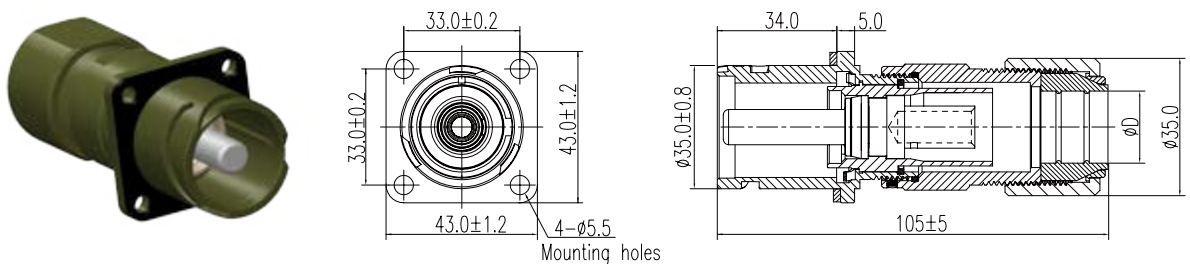
Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTC6L 2001 SC R10 D22	20-01	20	10mm	22mm <sup>2</sup>	ASGTC-R-R10S	Φ8.0 to Φ10.0
HVGTC6L 2001 SC R10 D50	20-01	20	10mm	50mm <sup>2</sup>	ASGTC-R-R10S	Φ14.5 to Φ16.0

HVGTC6L-2001-A, STRAIGHT PLUG, WITH CABLE CLAMP, TRACTION RESISTANT (FEMALE CONTACT)



Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTC6L 2001 SC R10 A22	20-01	20	10mm	22mm <sup>2</sup>	ASGTC-R-R10S	Φ7.5 to Φ9.5
HVGTC6L 2001 SC R10 A50	20-01	20	10mm	50mm <sup>2</sup>	ASGTC-R-R10S	Φ10.5 to Φ12.5

HVGTC1L-2001-D, RECEPTACLE, NUT TERMINATION (MALE CONTACT)



Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTC1L 2001 PC R10 D22	20-01	20	10mm	22mm <sup>2</sup>	ASGTC-R-R10S	Φ8.0 to Φ10.0
HVGTC1L 2001 PC R10 D50	20-01	20	10mm	50mm <sup>2</sup>	ASGTC-R-R10S	Φ14.5 to Φ16.0

## HVGTC 3201 3000V

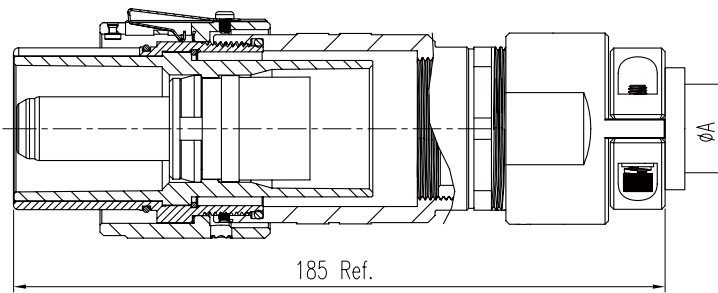
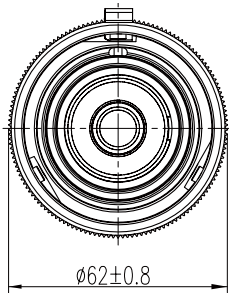
Insert arrangement: 32-01

Contact size: 16mm, 18mm Radsok

Max rated current: 500A (16mm Radsok), 700A (18mm Radsok)

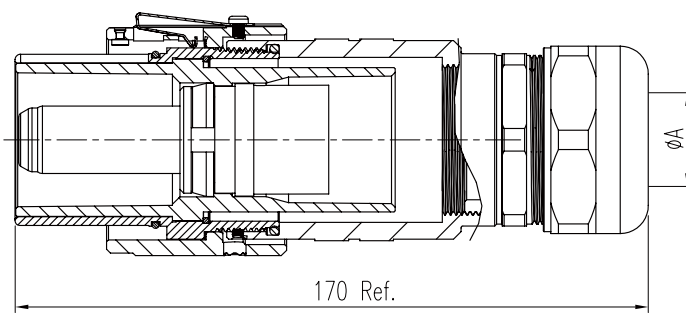
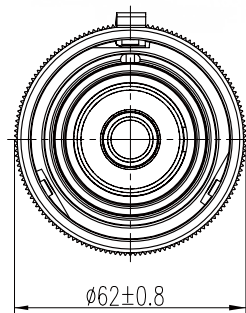
Max rated voltage: 3000V r.m.s

## HVGTC6L 3201 PC RXX AXXX, STRAIGHT PLUG, WITH CABLE CLAMP (MALE CONTACT)



Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTC6L 3201 PC R16 AXX	32-01	32	16mm	25 to 240 mm <sup>2</sup>	ASGTC-R-R16	Φ16 to Φ32
HVGTC6L 3201 PC R18 AXX	32-01	32	18mm	50 to 240 mm <sup>2</sup>	ASGTC-R-R18	Φ18 to Φ32

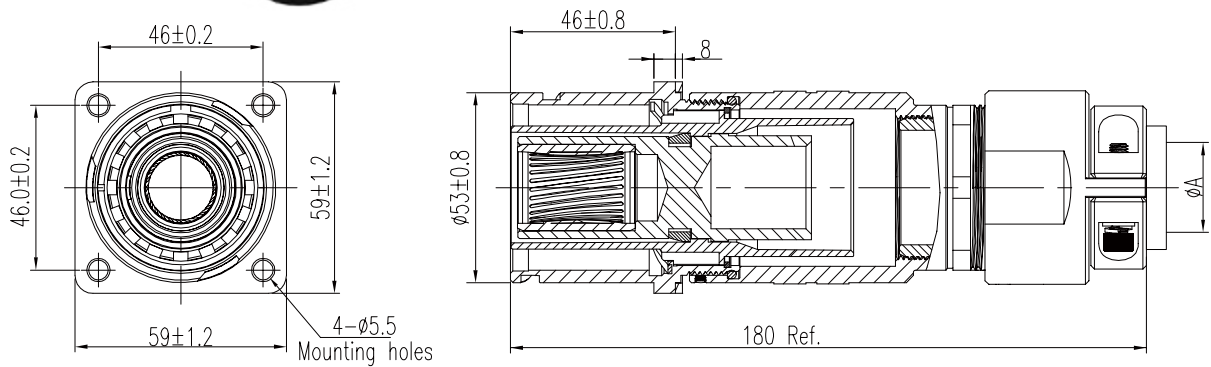
## HVGTC6L 3201 PC RXX DXXX, STRAIGHT PLUG, NUT TERMINATION (MALE CONTACT)



Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTC6L 3201 PC R16 DXX	32-01	32	16mm	25 to 240 mm <sup>2</sup>	ASGTC-R-R16	Φ16 to Φ32
HVGTC6L 3201 PC R18 DXX	32-01	32	18mm	50 to 240 mm <sup>2</sup>	ASGTC-R-R18	Φ18 to Φ32

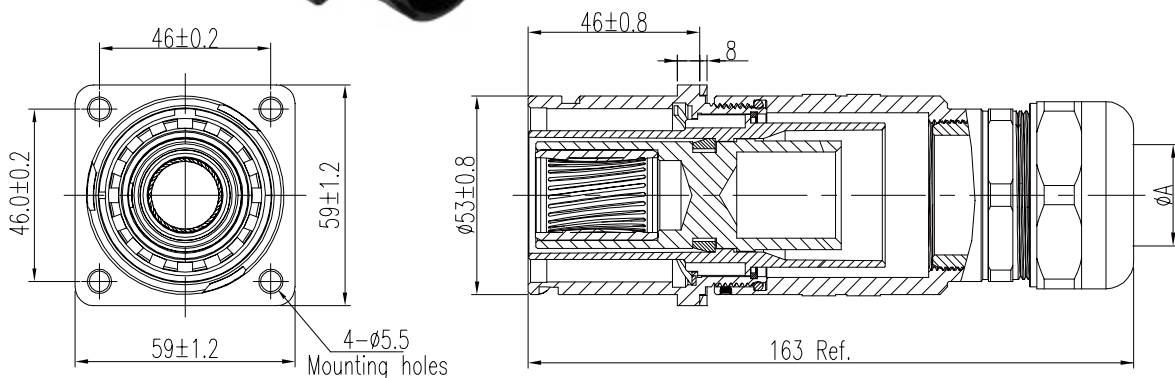
HVGTC 32-01 3000V

HVGTC1L 3201 SC RXX AXXX, RECEPTACLE, WITH CABLE CLAMP (FEMALE CONTACT)



Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTC1L 3201 SC R16 AXX	32-01	32	16mm	25 to 240 mm <sup>2</sup>	ASGTC-R-R16	Φ16 to Φ32
HVGTC1L 3201 SC R18 AXX	32-01	32	18mm	50 to 240 mm <sup>2</sup>	ASGTC-R-R18	Φ18 to Φ32

HVGTC1L 3201 SC RXX DXXX, RECEPTACLE, NUT TERMINATION (FEMALE CONTACT)

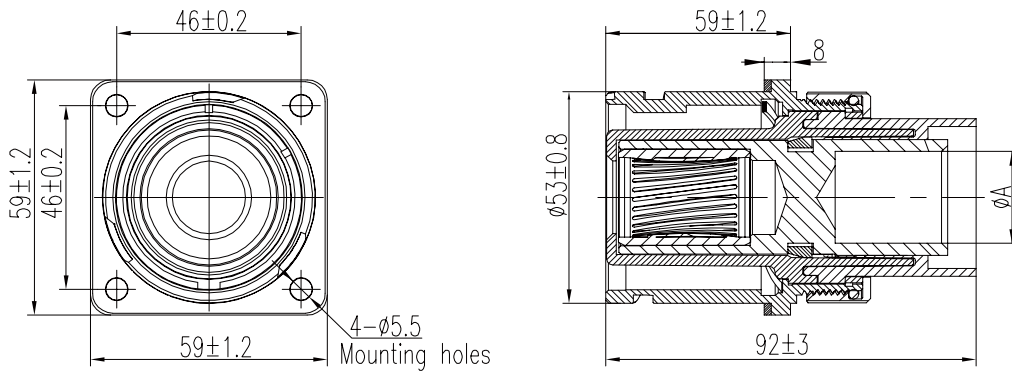


Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTC1L 3201 SC R16 DXX	32-01	32	16mm	25 to 240 mm <sup>2</sup>	ASGTC-R-R16	Φ16 to Φ32
HVGTC1L 3201 SC R18 DXX	32-01	32	18mm	50 to 240 mm <sup>2</sup>	ASGTC-R-R18	Φ18 to Φ32



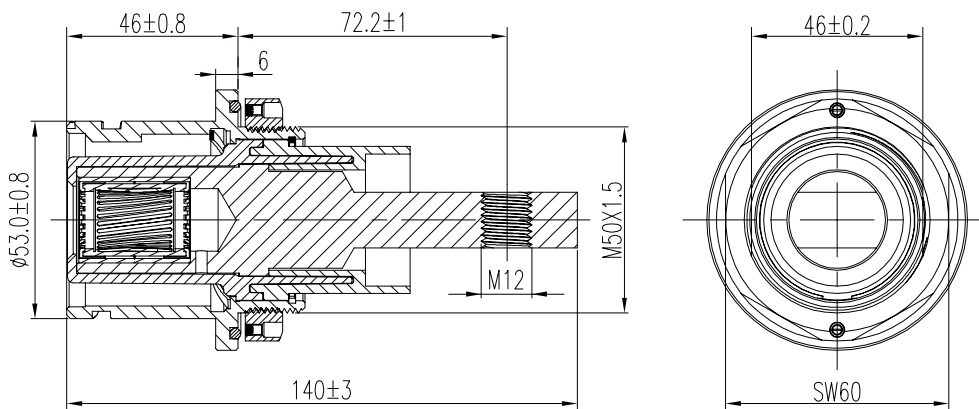
## HVGTC 32-01 3000V

### HVGTC3A 3201 SC RXX XXX, BOX MOUNTED RECEPTACLE (FEMALE CONTACT)



Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Cable OD
HVGTC3A 3201 SC R16 XXX	32-01	32	16mm	25 to 185 mm <sup>2</sup>	Φ8.0 to Φ10.0
HVGTC3A 3201 SC R18 XXX	32-01	32	18mm	50 to 185 mm <sup>2</sup>	Φ14.5 to Φ16.0

### HVGTC5A 3201 SM RXX XXX, JAM NUT RECEPTACLE

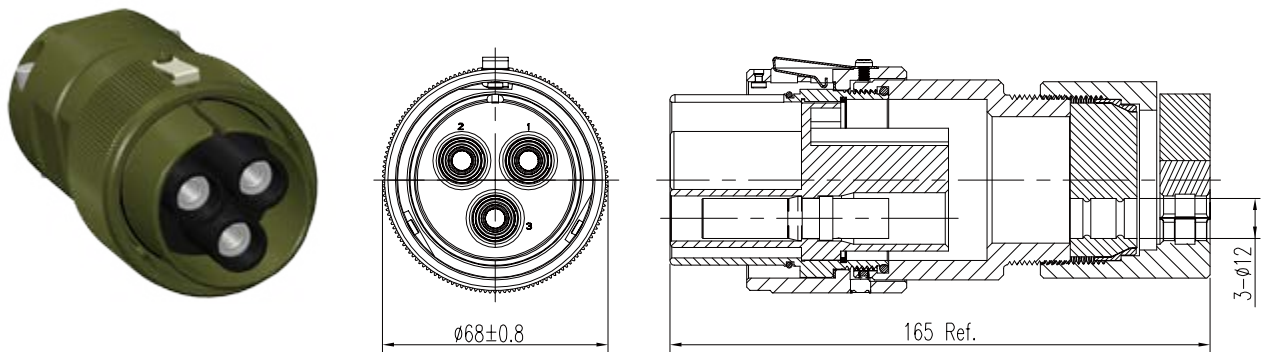


Part number	Insert arrangement	Shell size	Contact size
HVGTC5A 3201 SM R16 XXX	32-01	32	16mm
HVGTC5A 3201 SM R18 XXX	32-01	32	18mm

HVGTC 3603-R6 2000V

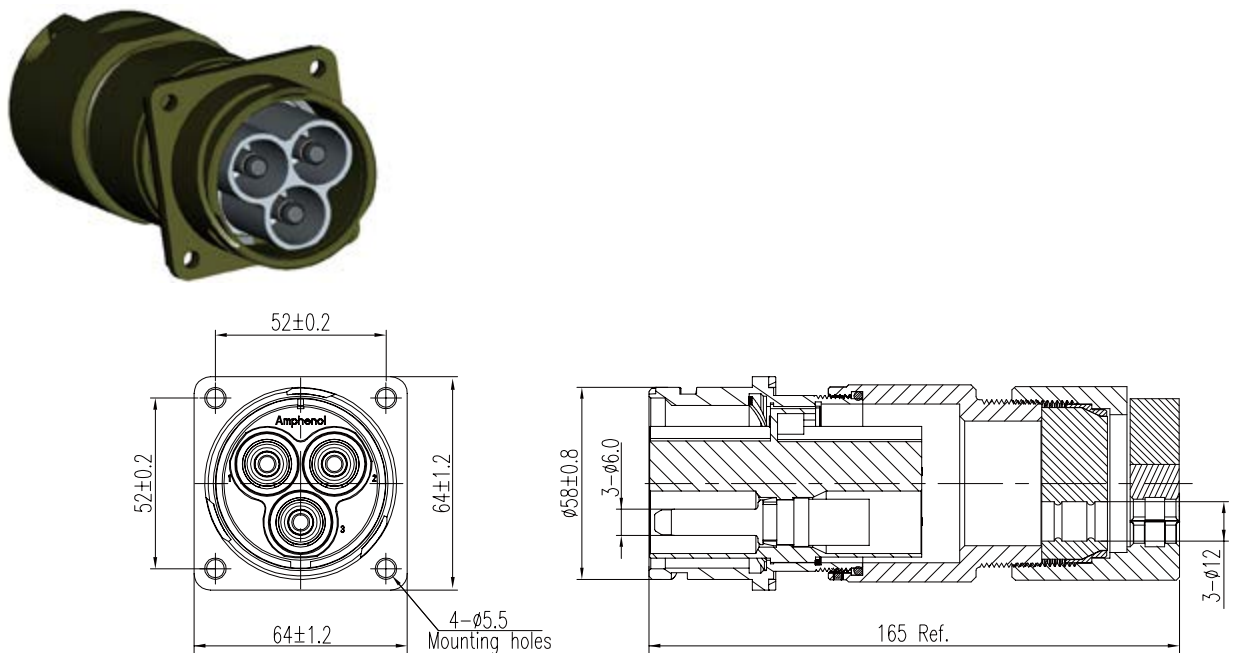
Insert arrangement: 36-03-R6  
 Contact size: 6mm Crimp type  
 Max rated current: 100A  
 Max rated voltage: 2000V r.m.s  
 Cable size: 14mm<sup>2</sup> to 25mm<sup>2</sup>

HVGTC6L 3603 SC R6 DXX, PLUG, WITH CABLE CLAMP (FEMALE CONTACT)



Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTC6L 3603 SC R6 DXX	36-03	36	3 x R6	14 to 25 mm <sup>2</sup>	ASGTC-R-R6	Φ8 to Φ10

HVGTC1L 3603 PC R6 DXX, CABLE MOUNTED RECEPTACLE (MALE CONTACT)

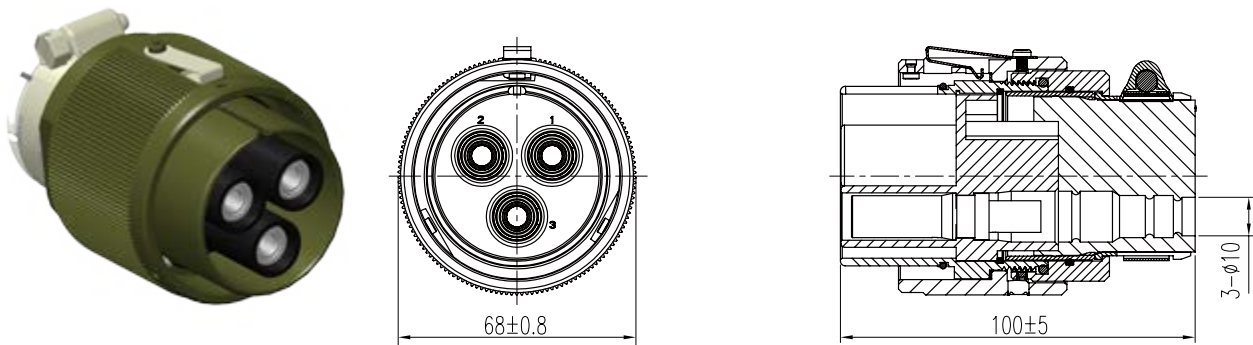


Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTC1L 3603 PC R6 DXX	36-03	36	3 x R6	14 to 25 mm <sup>2</sup>	ASGTC-R-R6	Φ8 to Φ10

## HVGTC 3603-R6 1000V

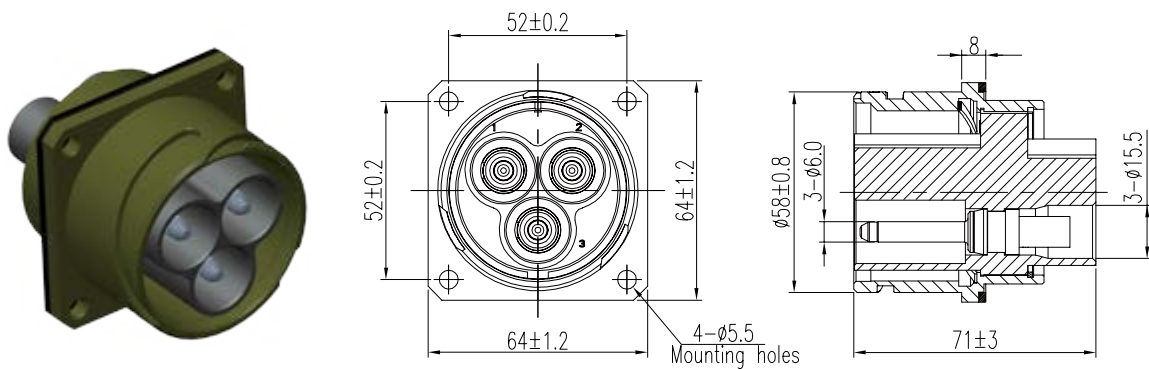
Insert arrangement: 36-03-R6  
 Contact size: 6mm Crimp type  
 Max rated current: 100A  
 Max rated voltage: 1000V r.m.s  
 Cable size: 14mm<sup>2</sup> to 25mm<sup>2</sup>

## HVGTC6L 3603 SC R6 LF XX, STRAIGHT PLUG WITH HOOP TERMINATION (FEMALE CONTACT)



Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTC6L 3603 SC R6 LF XX	36-03	36	3 x R6	14 to 25 mm <sup>2</sup>	ASGTC-R-R6	Φ8 to Φ10

## HVGTC3A 3603 PC R6 XX, BOX MOUNTED RECEPTACLE (MALE CONTACT)

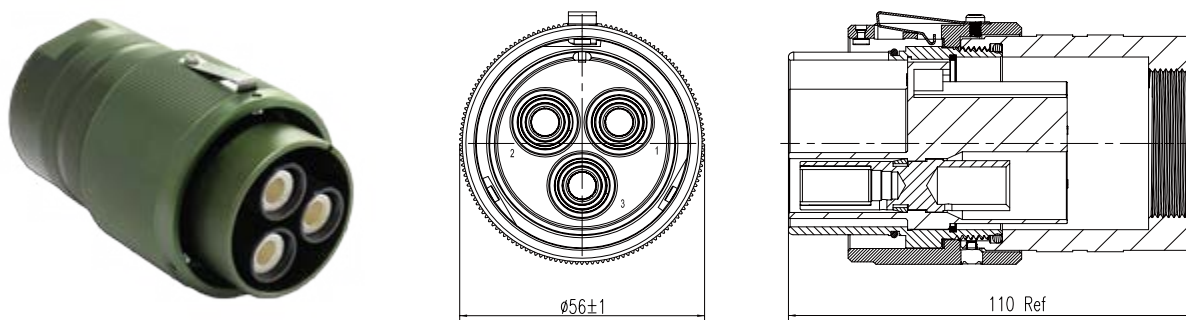


Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTC3A 3603 PC R6 XX	36-03	36	3 x R6	14 to 25 mm <sup>2</sup>	ASGTC-R-R6	Φ8 to Φ10

HVGTC 3603-R8 2500V

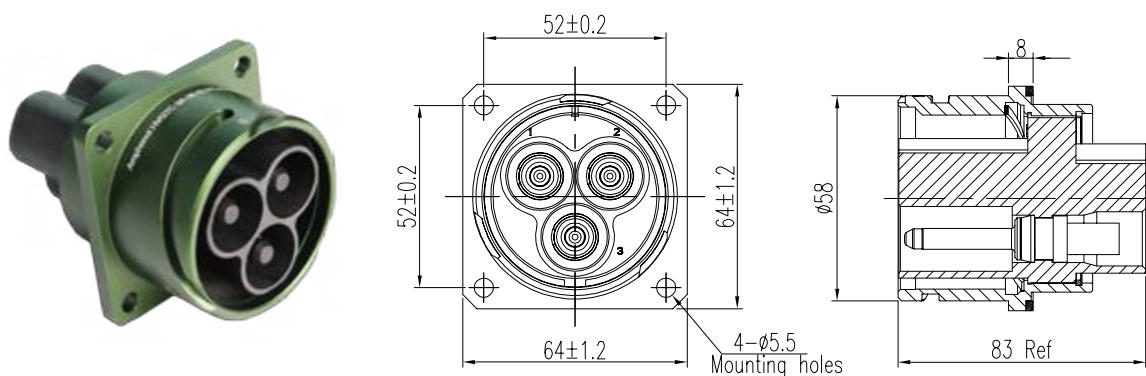
Insert arrangement: 36-03-R8  
 Contact size: 8mm Crimp type  
 Max rated current: 150A  
 Max rated voltage: 2500V r.m.s  
 Cable size: 14mm<sup>2</sup> to 50mm<sup>2</sup>

HVGTC6L 3603 SC R8 MXX, PLUG WITH THREAD AND PG ADAPTER TERMINATION (FEMALE CONTACT)



Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTC6L 3603 SC R8 MXX	36-03	36	3 x R8	14 to 50 mm <sup>2</sup>	ASGTC-R-R8	Φ8 to Φ14

HVGTC3A 3603 PC R8 XX MOUNTED RECEPTACLE (MALE CONTACT)



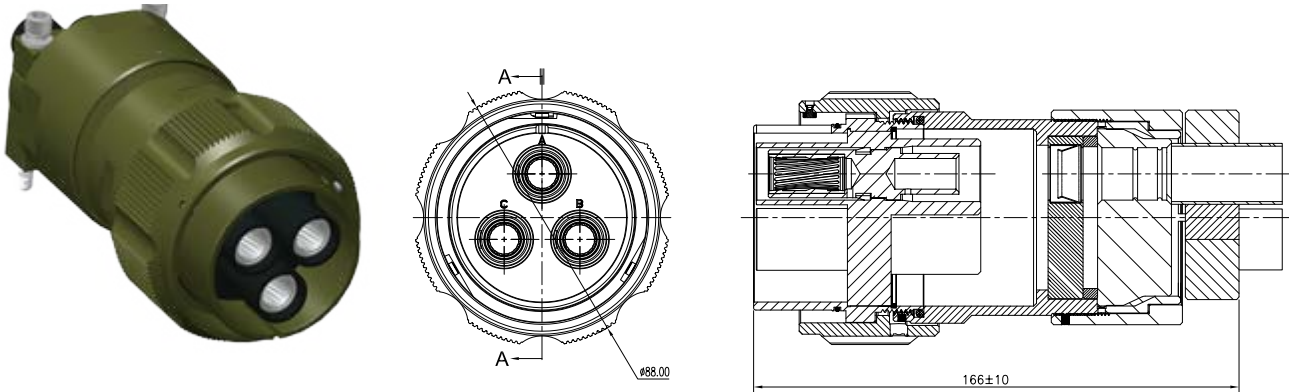
Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTC3A 3603 PC R8 XX	36-03	36	3 x R8	14 to 50 mm <sup>2</sup>	ASGTC-R-R8	Φ8 to Φ14

# HVGTCN

## HVGTCN 4003 2500V

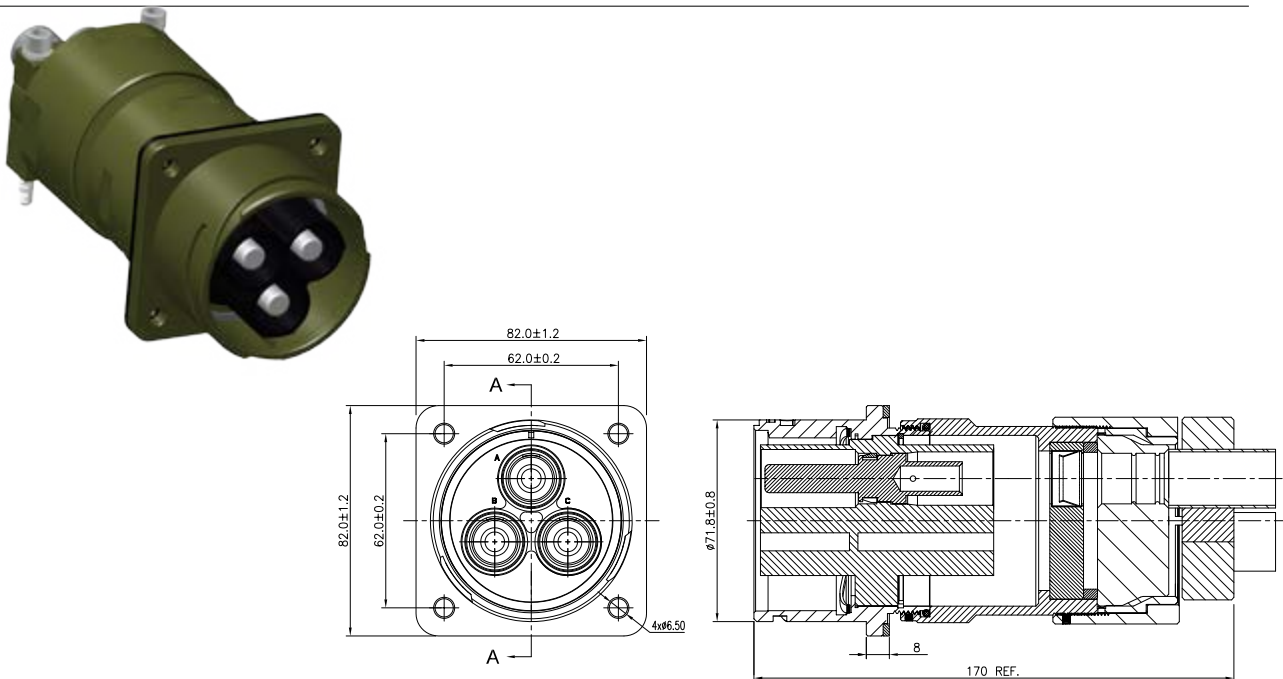
Insert arrangement: 40-03  
 Contact size: 10mm Radsok / Crimp  
 Max rated current: 250A  
 Max rated voltage: 2500V r.m.s  
 Cable size: 25mm<sup>2</sup> to 70mm<sup>2</sup>

## HVGTCN6L 4003 SC R10 AXX, STRAIGHT PLUG, WITH CABLE CLAMP (FEMALE CONTACT)



Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTCN6L 4003 SC R10 AXX	40-03	40	3 x R10	25 to 70 mm <sup>2</sup>	ASGTC-R-R10	Φ14 to Φ18

## HVGTCN3L 4003 PC R10 AXX, RECEPTACLE WITH CABLE CLAMP (MALE CONTACT)

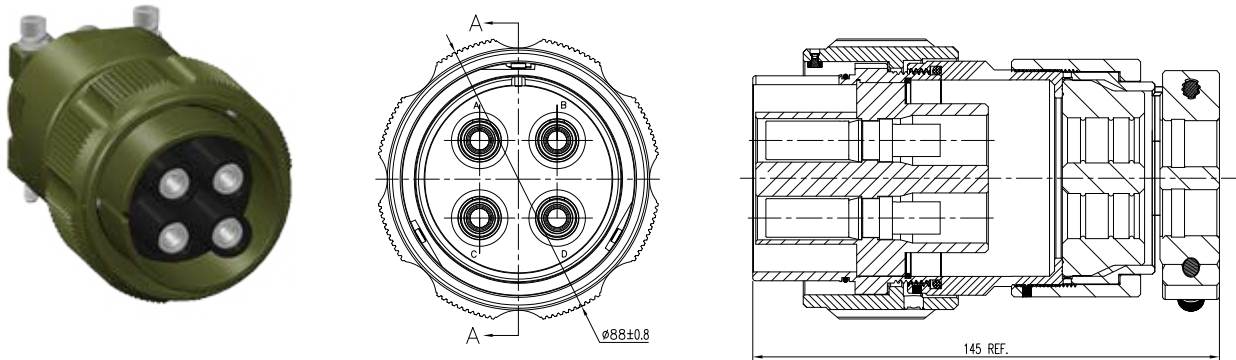


Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTCN3L 4003 PC R10 AXX	40-03	40	3 x R10	25 to 70 mm <sup>2</sup>	ASGTC-R-R10	Φ14 to Φ18

## HVGTCN 4004 2000V

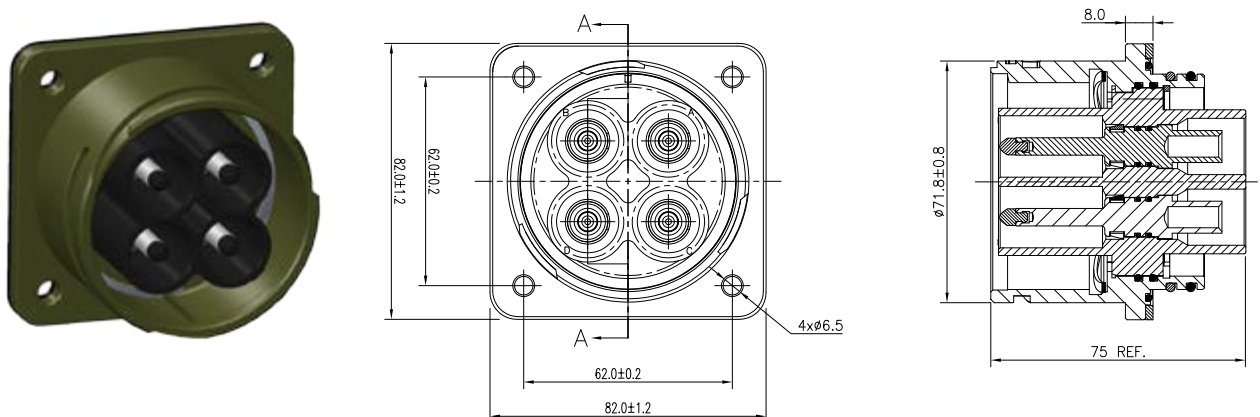
Insert arrangement: 40-04  
 Contact size: 6mm Crimp  
 Max rated current: 100A  
 Max rated voltage: 2000V r.m.s  
 Cable size: 14mm<sup>2</sup> to 25mm<sup>2</sup>

## HVGTCN6L 4004 SC R6 AXX, STRAIGHT PLUG, WITH CABLE CLAMP (FEMALE CONTACT)



Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTCN6L 4003 SC R6 AXX	40-03	40	4 x R6	14 to 25 mm <sup>2</sup>	ASGTC-R-R6	Φ8 to Φ10

## HVGTCN3A 4004 PC R6 XX, BOX MOUNTED RECEPTACLE (MALE CONTACT)

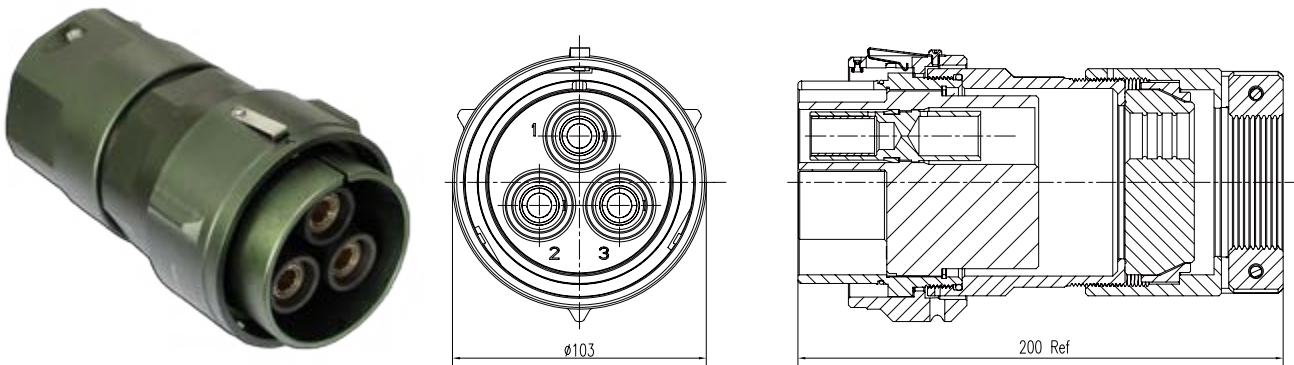


Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTCN3A 4004 PC R6 AXX	40-04	40	4 x R6	14 to 25 mm <sup>2</sup>	ASGTC-R-R6	Φ8 to Φ10

## HVGTC 4803 3000V

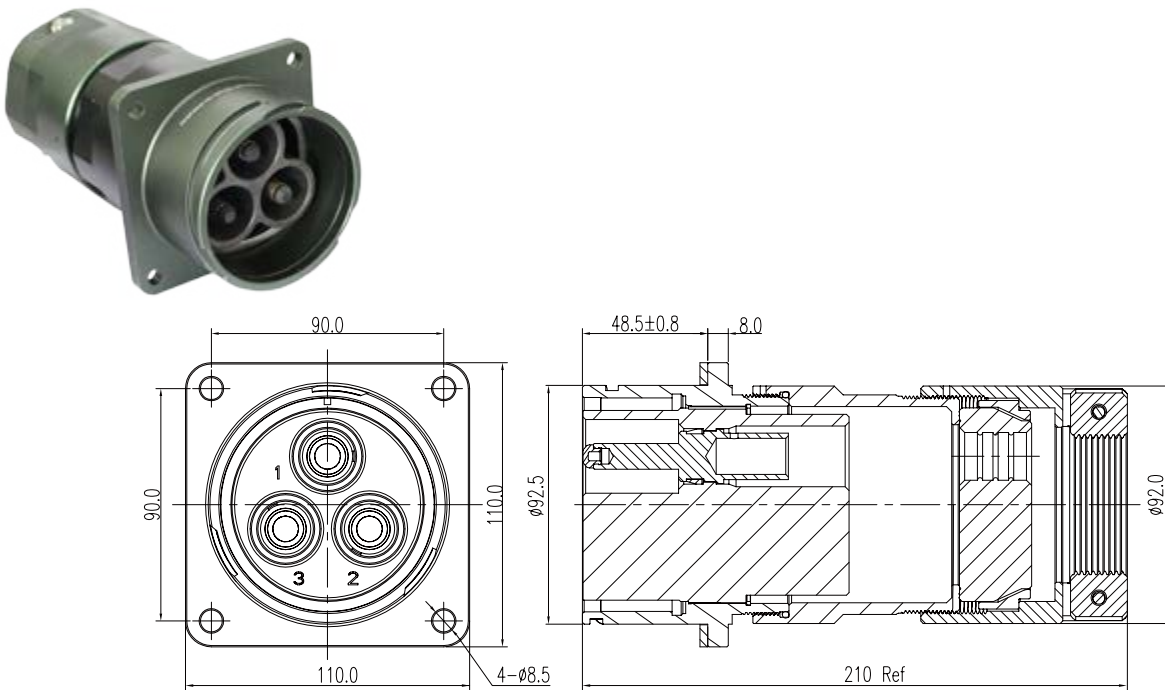
Insert arrangement: 48-03  
 Contact size: 10mm Crimp type  
 Max rated current: 250A  
 Max rated voltage: 3000V r.m.s  
 Cable size: 25mm<sup>2</sup> to 70mm<sup>2</sup>

### HVGTC6L 4803 SC R10 DXX, STRAIGHT PLUG, WITH CABLE CLAMP (FEMALE CONTACT)



Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Spanner for cable clamp	Spanner for coupling	Cable OD
HVGTC6L 4803 SC R10 DXX	48-03	48	3 x R10	25 to 70 mm <sup>2</sup>	ASGTC-R-R10	ASGTC-B48A	ASGTC-B48B	Φ14 to Φ18

### HVGTC3L 4803 PC R10 DXX, RECEPTACLE WITH CABLE CLAMP (MALE CONTACT)

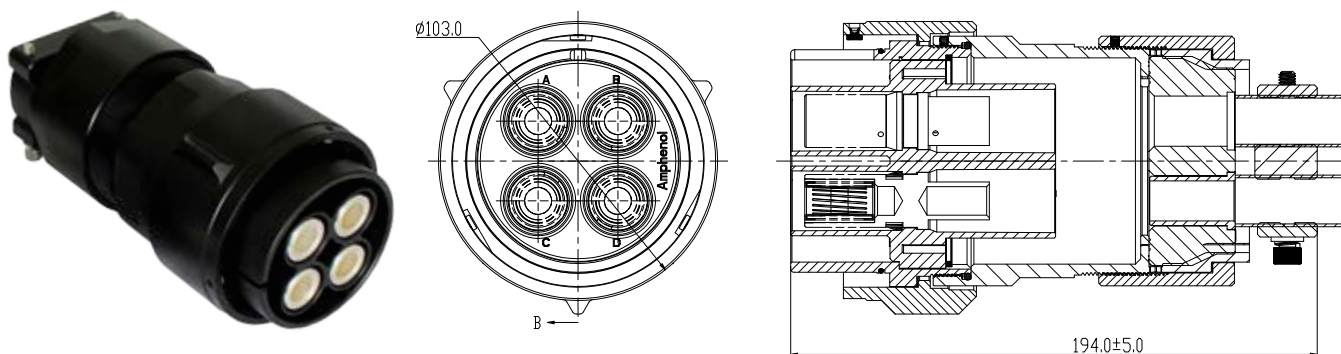


Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Spanner for cable clamp	Spanner for coupling	Cable OD
HVGTC3L 4803 PC R10 DXX	48-03	48	3 x R10	25 to 70mm <sup>2</sup>	ASGTC-R-R10	ASGTC-B48A	ASGTC-B48B	Φ14 to Φ18

HVGTCN 4804 3000V

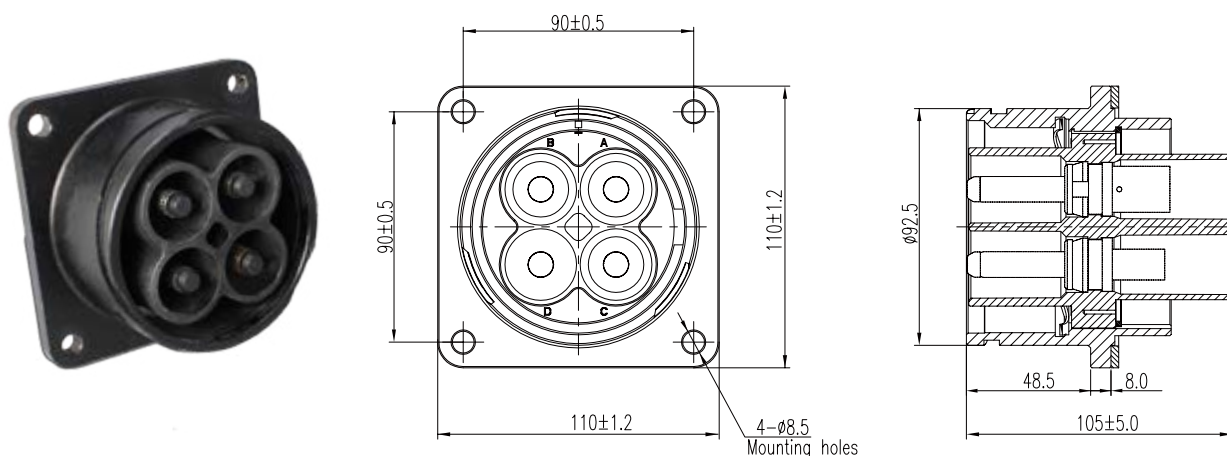
Insert arrangement: 48-04  
 Contact size: 10mm, 14mm Crimp type  
 Max rated current: 350A  
 Max rated voltage: 3000V r.m.s  
 Cable size: 25mm<sup>2</sup> to 95mm<sup>2</sup>

HVGTCN6L 4804 SC R10 DXX B, STRAIGHT PLUG, WITH CABLE CLAMP (FEMALE CONTACT)



Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTCN6L 4804 SC R10 D25 B	48-04	48	10mm	25mm <sup>2</sup>	ASGTC-R-R10	Φ12.0 to Φ14.0
HVGTCN6L 4804 SC R10 D35 B	48-04	48	10mm	35mm <sup>2</sup>	ASGTC-R-R10	Φ13.0 to Φ15.0
HVGTCN6L 4804 SC R10 D50 B	48-04	48	10mm	50mm <sup>2</sup>	ASGTC-R-R10	Φ14.0 to Φ16.0
HVGTCN6L 4804 SC R10 D70 B	48-04	48	10mm	70mm <sup>2</sup>	ASGTC-R-R10	Φ16.0 to Φ18.0
HVGTCN6L 4804 SC R14 D95 B	48-04	48	14mm	95mm <sup>2</sup>	EMP3-3 RR14	Φ19.5 to Φ21.5

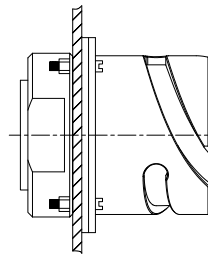
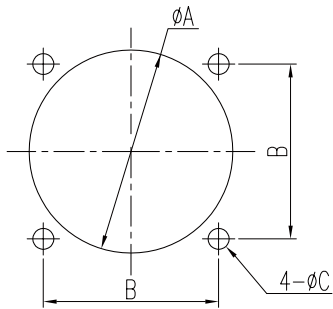
HVGTCN3A 4804 PC R10 XX B, BOX MOUNTED RECEPTACLE (MALE CONTACT)



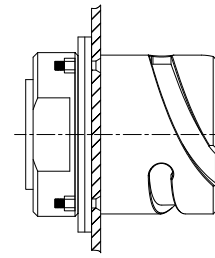
Part number	Insert arrangement	Shell size	Contact size	Crimping cable	Extraction tool	Cable OD
HVGTCN3A 4804 PC R10 25 B	48-04	48	10mm	25mm <sup>2</sup>	ASGTC-R-R10	Φ12.0 to Φ14.0
HVGTCN3A 4804 PC R10 35 B	48-04	48	10mm	35mm <sup>2</sup>	ASGTC-R-R10	Φ13.0 to Φ15.0
HVGTCN3A 4804 PC R10 50 B	48-04	48	10mm	50mm <sup>2</sup>	ASGTC-R-R10	Φ14.0 to Φ16.0
HVGTCN3A 4804 PC R10 70 B	48-04	48	10mm	70mm <sup>2</sup>	ASGTC-R-R10	Φ16.0 to Φ18.0
HVGTCN3A 4804 PC R14 95 B	48-04	48	14mm	95mm <sup>2</sup>	EMP3-3 RR14	Φ19.5 to Φ21.5



PANEL MOUNTED DIMENSIONS



Front mounted



Rear mounted




Dimension: mm

Shell size	$\phi A(\pm_0^1)$	$B\pm 0.2$	$\phi C\pm 0.2$
	Front / Rear Mounted		
20	36	33	5.5
32	54	46	5.5
36	59.5	52	5.5
40	73.5	62	6.5
48	93.5	90	8.5

Remark: Panel thickness below 5mm for rear mounted and must use with nut.

TOOLS

No.	Crimping tool	Cable size
1	APHWA23KIT	14 to 50 mm <sup>2</sup>
2	APH96-978-2	25 & 50 mm <sup>2</sup>
3	Crimping tool MS400-10 match with Hydraulic pump CP700	16 to 400 mm <sup>2</sup>

#R6 Extraction tool ASGTC-R-R6	#R10 Extraction tool ASGTC-R-R8	#R10 Extraction tool ASGTC-R-R10	#R14 Extraction tool EMP 33-R-R14
			
#R16, R18 Extraction tool ASGTC-R-R16	Spanner for cable clamp Fo shell size 48 ASGTC-B48A	Spanner for coupling For shell size 48 ASGTC-B48B	
			
Crimping tool APHWA23KIT (Pneumatic)	Crimping tool APH96-978-2 (Hydraulic pressure)	Crimping tool APMS240-10 (Hydraulic pressure)	
			

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Notes:

Amphenol PCD Shenzhen has made every effort to ensure that the information contained in this catalog is accurate at the time of publication. Specifications or information stated in this publication are subject to change without notice.

Amphenol PCD Shenzhen reserves the right to clarify this catalog.



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Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.