

Amphenol® LTW®



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Amphenol® LTW®

Waterproof Connector Solutions

Amphenol® LTW® Innovation in Waterproof Solution



Complete Range of Waterproof Connectors & Cable Assembly

www.amphenolltw.com

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About Amphenol LTW

Founded in 1993 in Taiwan by Peter Chen, LTW Technology is a professional innovator and manufacturer focusing on outdoor waterproof connectors and solutions.

LTW Technology was acquired by Amphenol Group in April of 2010 and now the official name changed from "LTW Technology" to "Amphenol LTW Technology Co., Ltd.". Amphenol LTW is still lead by current management team, under the leadership of Peter Chen and will dedicate to the same principle that LTW has driven relationship with its customers in the past: Quality, Service, Enthusiasm, Professionalism and Innovation.

Amphenol LTW has actively devoted to various outdoor and industrial applications by successfully developing high-end waterproof connectors. We acquired many worldwide patents and certification such as ISO14001, ISO9001, and NMEA 2000...etc. Amphenol LTW is well positioned to enhance products quality and customer service.

Headquartered in Shijiang city, Taipei County-Taiwan, Amphenol LTW group has approximately 620 employees with R&D center in Hualien, East of Taiwan, Automated CNC, tool and mold factories in Shulin, Taipei County, and a complete production line operating in Kunshan, Jiangsu Province, China.

Our Vision

Being a world class waterproof connector company.

Our Mission

Create profitable growth to shareholder values.



Taiwan Excellence Award.



Taiwan Small & Medium Enterprise Innovation Award.



Innovation Achievement Commendation Award.



History



Core Technology in Waterproof

Profit through innovation, differentiation and new markets

Service

Global Operation
Customer Satisfaction
Total Solution

Innovation

Innovation via Technology
Investment in R&D
Investment in Technology

Quality

Testing Verification
Quality Assurance
World class Lab

Social Responsibility (Global Citizenship)

Regular sponsorship and donations to local disadvantaged minorities and provide assistances to students in remote rural districts.

Special Aids

- Donating money to remote districts in the eastern of Taiwan
- Donating to Taiwan's private charity institution which voluntarily build bridges and pave roads in countryside.
- Contributing vertical injection machines to colleges and universities for students' practice.
- Donating ambulances to remote rural districts in Taiwan.
- Donating money to G.S.W.F.; a Taiwanese foundation that helps people with PVS.



Head Office (Taipei)

R&D Center in Hualien

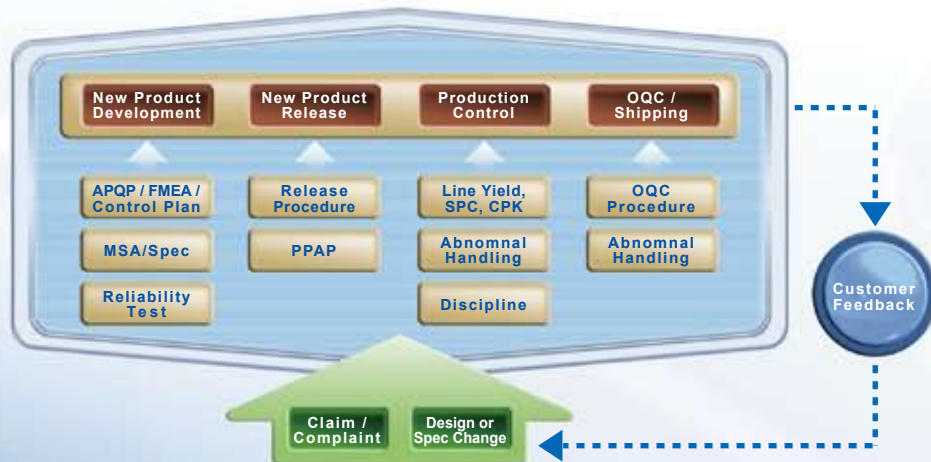
CNC Factory

18th National Award of Outstanding Small & Medium Enterprises

Quality System



Amphenol LTW QRA PDCA Review Loops



Lab. Equipments

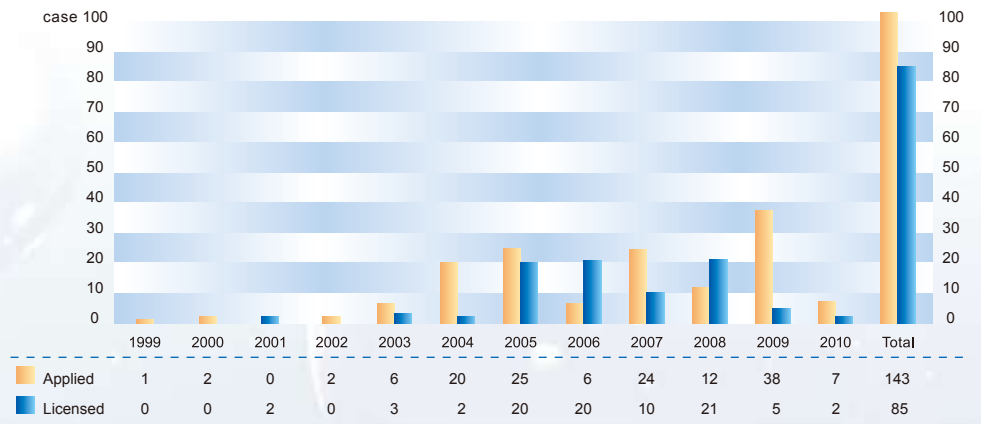


RD & IP

R&D Resource Integration



Amphenol LTW Patents

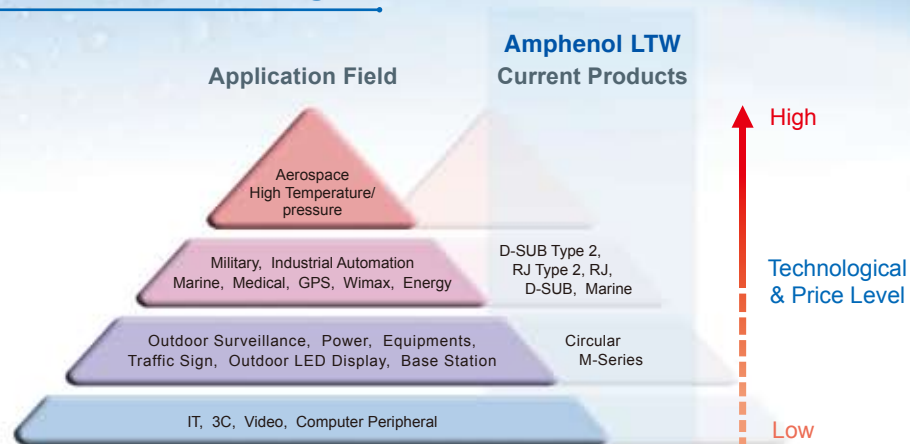


Numbers of Patent Applications & Licences



- LTW lab equipment also includes:**
- IPX7 / IPX8 Waterproof Tester
 - Ultraviolet Tester
 - Flame Tester
 - Temperature / Humidity Chamber
 - Salt Water Spray Tester
 - Bending Tester
 - Drop Tester
 - Vibration Simulator System
 - ...and many more.

Product Positioning



Products

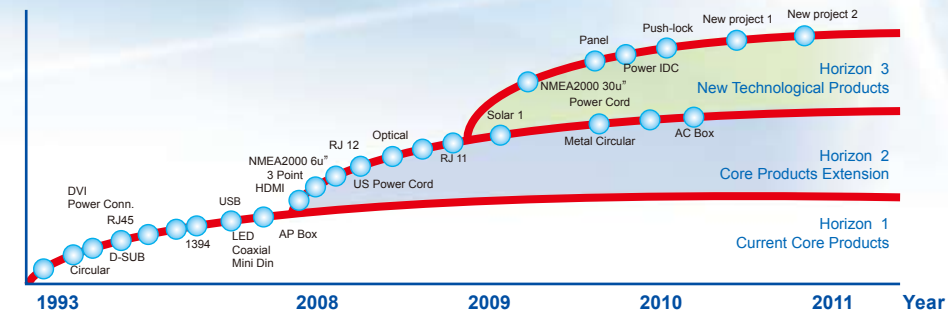
Amphenol LTW designs and manufactures waterproof connectors which are high/low temperature resistant, UV resistant, and dusts and corrosion proof and cable assemblies for various purposes and applications. All products meet IP66, IP67, IP68 or IP69K. The waterproof range includes Circular, RJ45, D-sub, Sensor, USB, DVI/HDMI, Power Connector, Hybrid Connector, etc.



Over 5,000 items

All products are designed and built to meet high standard requirements such as: Temperature resistant, Fire-proof, Dirt-proof, EMI-proof, Vibration-proof, Shock-proof, UV-resistant, Oil-resistant, Chemical resistant, Environmental-friendly, Durable, Long Life cycle, and Easy of Use.
All products are designed to provide customers value-added solutions whilst enabling to be competitive and shorten time to market cycle.

3 Growth Horizon Strategy



Applications

Amphenol LTW is more than a supplier of connector but a solution provider to your challenges and problems.

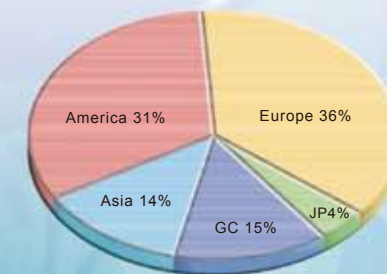
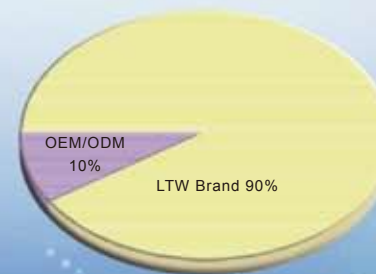
Amphenol LTW connector solutions targeting the following market applications:

- Aerospace, Medical
- Industrial Automation
- GPS
- Military, Marine
- Outdoor Surveillance
- LED Screen & Lighting
- Diving Device
- Automobile
- Renewable Energy
- Sonar Radar
- Audio / Video
- WiMax / Wireless Communication

Amphenol LTW is dedicated to satisfy worldwide customers by innovative design and qualified manufacture for different market segments

Sales by Products & Regions

Amphenol LTW Sales Revenue by Business Segments



Outdoor LED Solution

ENCLOSURE



Enclosure (AP Box, LTWAP-ODU-M03002)
& Cable Gland (LTWCSG-12M001)

5120 Pixels Data (Shielded Cat5)

AC Power Input

Power & Data to String

Continues

12 Watts per String

AC Power & Enclosure

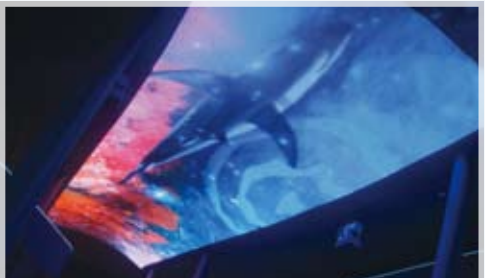
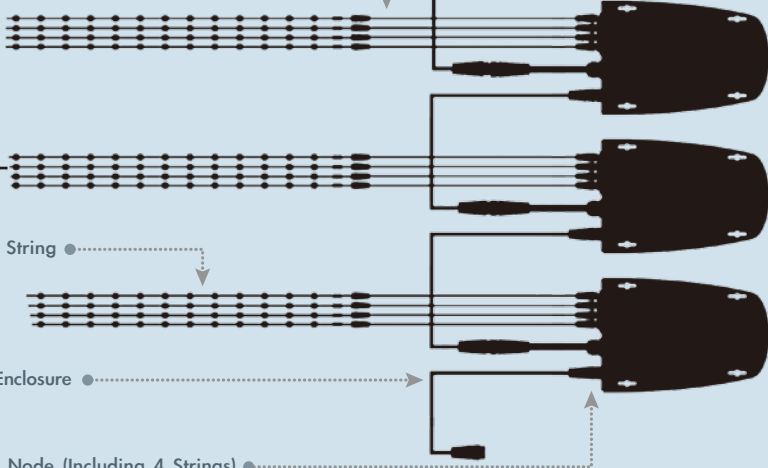
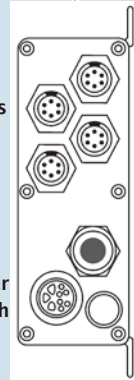
50 Watts per Node (Including 4 Strings)

Outputs

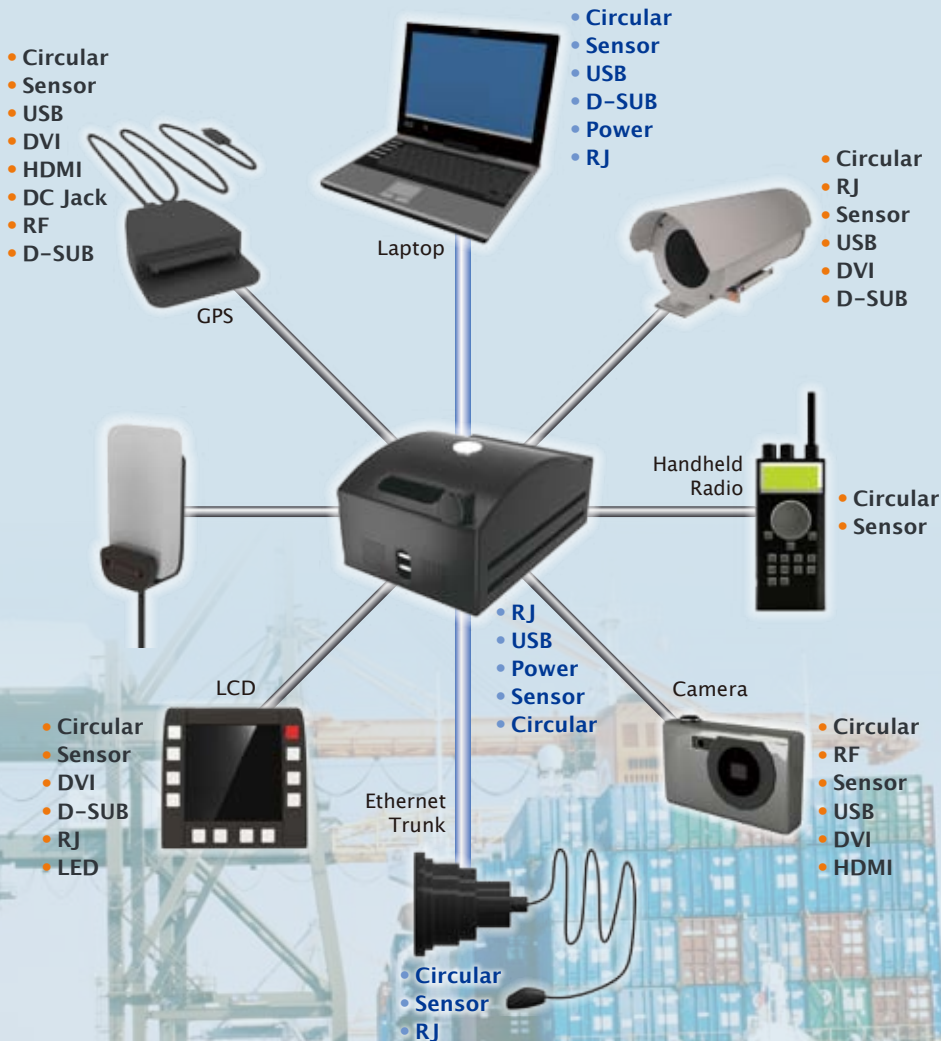
Data & Power through

Input tail

Membrane Vent



Tracking System for Industrial Solution



Marine Electronics Solution



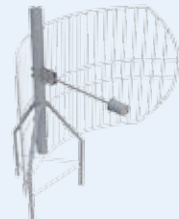
Outdoor Wireless Broadband Solution



Circular Series



M12 Series



Circular Series



RJ45 Series



D-SUB Series



Vent



RF & Coaxial



RJ45 Series



RF & Coaxial



Cable Gland



RJ45 Series



**CAT5 Lightning
Protectors**

Illustration for Amphenol LTW PV Solution



- 1 LTWSPC-01RMFS-LC7001
- 2 LTWSPC-01RFMS-LC7001
- 3 LTWSPC-01BMFA-LL7001
LTWSPC-01BMFA-LL7XXX
- 4 LTWSPC-01BFMA-LL7001
LTWSPC-01BFMA-LL7XXX
- 5 LTWCAP-DSOMMLC1
- 6 LTWCAP-DSOMFLC1
- 7 LTWSL-000000-HHB-YL001
- 8 LTWSL-000000-BBH-YL001
- 9 TOL-151701 (Tooling)
- 10 TOL-151702 (Tooling)

Adapter Type

- 1 Female to 2 Male
- 1 Male to 2 Female

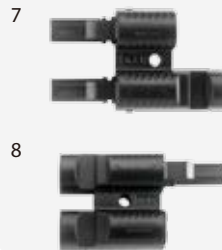
Assembly Type

- Male Connector + Cable
- Female Connector + Cable

Panel Type



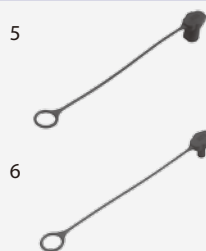
Adapter Type



Assembly Type



Cap Type



Tooling



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XXX - XX X X X X - X X X XXX

Number of Contacts

- A2, A3,Pin
Receptacle
- B1, B2,Pin

Style

- A – For Cable with S/R
- B – For Cable without S/R
- X – For Box
- P – For Panel Front Mounting

Connector Style

- M – Male Connector
- F – Female Connector

Contact Type

- M – Male
- F – Female
- C – Combo

Back Shell

- L – Straight
(180° For Cable Type)
- R-Right Angle
(90° For Cable Type)
- A – 2 Hole
- B – 4 Hole
- C – 6 Hole
- D – 0 Hole

Mating Style

- L – Lock
- S – Screw
- Q – Quick

Assembly Style

- M – Molding Type
- A – Assembly Type

Specification

- PAR1 – 2-Wire Straight Plug IRAM 2063 10A 250V
- PAR2 – 3-Wire Straight Plug IRAM 2073 10A 250V
- PAU1 – 2-Wire Insulated Straight Plug AS/NZS 3112: 2000 10A 250V
- PAU2 – 3-Wire Insulated Straight Plug AS/NZS 3112: 2000 10A 250V
- PAU3 – 3-Wire Insulated Straight Plug AS/NZS 3112: 2000 15A 250V
- PAU4 – 3-Wire Insulated Straight Plug AS/NZS 3112: 2000 20A 250V
- PBR1 – 2-Wire $\frac{1}{8}$ 4.0mm Straight Plug NBR 6147 10A 250V
- PBR2 – 2-Wire $\frac{1}{8}$ 4.8mm Straight Plug NBR 6147 16A 250V
- PBR3 – 2-Wire $\frac{1}{8}$ 4.8mm Straight Plug NBR 6147 15A 250V
- PBR4 – 2-Wire $\frac{1}{8}$ 4.8mm Straight Plug NBR 6147 20A 250V
- PUS1 – 2-Wire NEMA 1-15P Straight Plug UL498 UL817 10A 125V
- PUS2 – 3-Wire NEMA 5-15P Straight Plug UL498 UL817 10A 125V
- PUS3 – 3-Wire NEMA 5-20P Straight Plug UL498 UL817 15A 125V
- PUS4 – 3-Wire NEMA 6-15P Straight Plug UL498 UL817 15A 250V
- PUS5 – 3-Wire NEMA 6-20P Straight Plug UL498 UL817 20A 250V
- PUS6 – 3-Wire NEMA 6-30P Straight Plug UL498 UL817 25A 250V
- PEU1 – 2-Wire Straight Plug EN 50075 2.5A 250V
- PEU2 – 2-Wire Straight Plug EN CEE7 (Std.Sht.XVII)16A 250V
- PEU3 – 2-Wire Straight Plug EN CEE7 (Std.Sht.VII)16A 250V
- PCH1 – 2-Wire Straight Plug GB2099.1 10A 250V
- PCH2 – 3-Wire Straight Plug GB2099.1 10A 250V

Waterproof Rating

- 6 = IP 66
- 7 = IP 67
- 8 = IP 68

Version

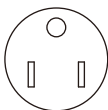
- Box Coloc
001, 002,
- 000 : Phantom
- For Cable
A01 - 1M ~ A99 - 99M
- A-SJTW
- B-SJTOOW

SPECIFICATIONS

No.	Specifications	Standard Value
01. Identifications		NEMA 5-15P
02. Description		Panel, Panel with Box, Power Cord
03. Current Rating / Pin Arrangements		125V/15A
04. Light Color		BLACK
05. Materials		Copper Alloy, Ni Plated Nylon + GF
06. Temperature Range		-20°C to +80°C
07. Operating Temperature		-20°C to +80°C
08. Waterproof Rating		IP67
09. Flame Test		HB
10. Thermal Shock		-20°C to +80°C
11. Breakdown Voltage		1250V / 1min <10ma (AC) 1250V / 1min <5.5ma (DC)
12. Corrosion		48 Hours Salt Spray Contact

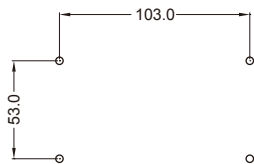
CONTACT PIN ARRANGEMENT

10A

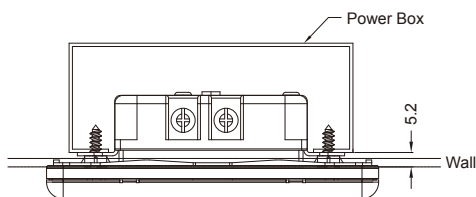


PANEL CUT-OUT

LTWPUS2-B2XFFA-SD7001

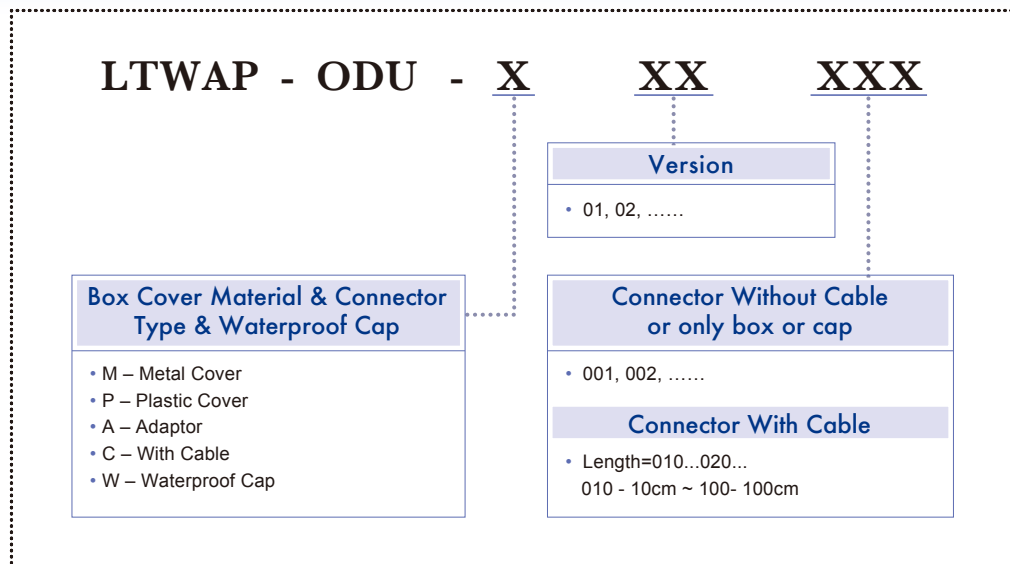


LTWPUS2-B2PFFA-SD6001

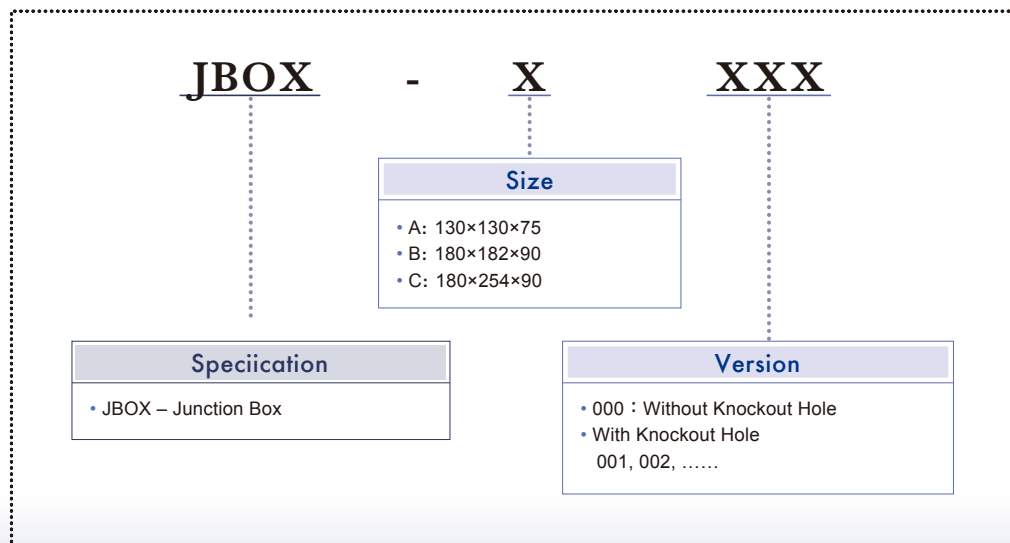


Recommended the distance from the box to wall
need to be 5.2mm

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWPUS2-A3AMMM-SL7A01 FEATURES: • Screw Type • Molding Type • IP 67		LTWPUS2-B2PFFA-SD6001 FEATURES: • Screw Type • Assembly Type • IP 66	
			LTWPUS2-B2XFFA-SD7001 FEATURES: • Screw Type • For Box • IP 67	



How to Order: Box Series-Junction Box



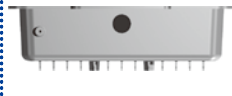
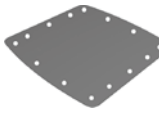
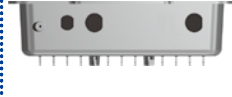
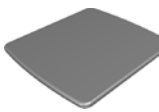
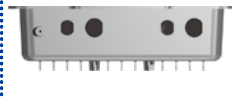
SPECIFICATIONS

No.	Specifications	Standard Value
01. Identifications		AP-02, AP-03, AP-04, AP-06, AP-07
02. Casing Materials		AP-02: Aluminum Rectangular AP-03: Light Gray Aluminum Square, Unpainted Bottom (Upon Request) AP-04: White Aluminum Square, Painted Bottom AP-06: Aluminum Square, Unpainted Bottom (Upon Request) AP-07: Aluminum Square, Painted Bottom
03. Cover Materials		AP-02: Metal AP-03, 04, 06, 07: Metal or Plastic
04. Accessories		AP-02: SPCC Accessories AP-03: SPCC Accessories AP-04: SPCC Accessories AP-06: SUS Accessories AP-07: SUS Accessories
05. Waterproof Rating		IP65, IP67

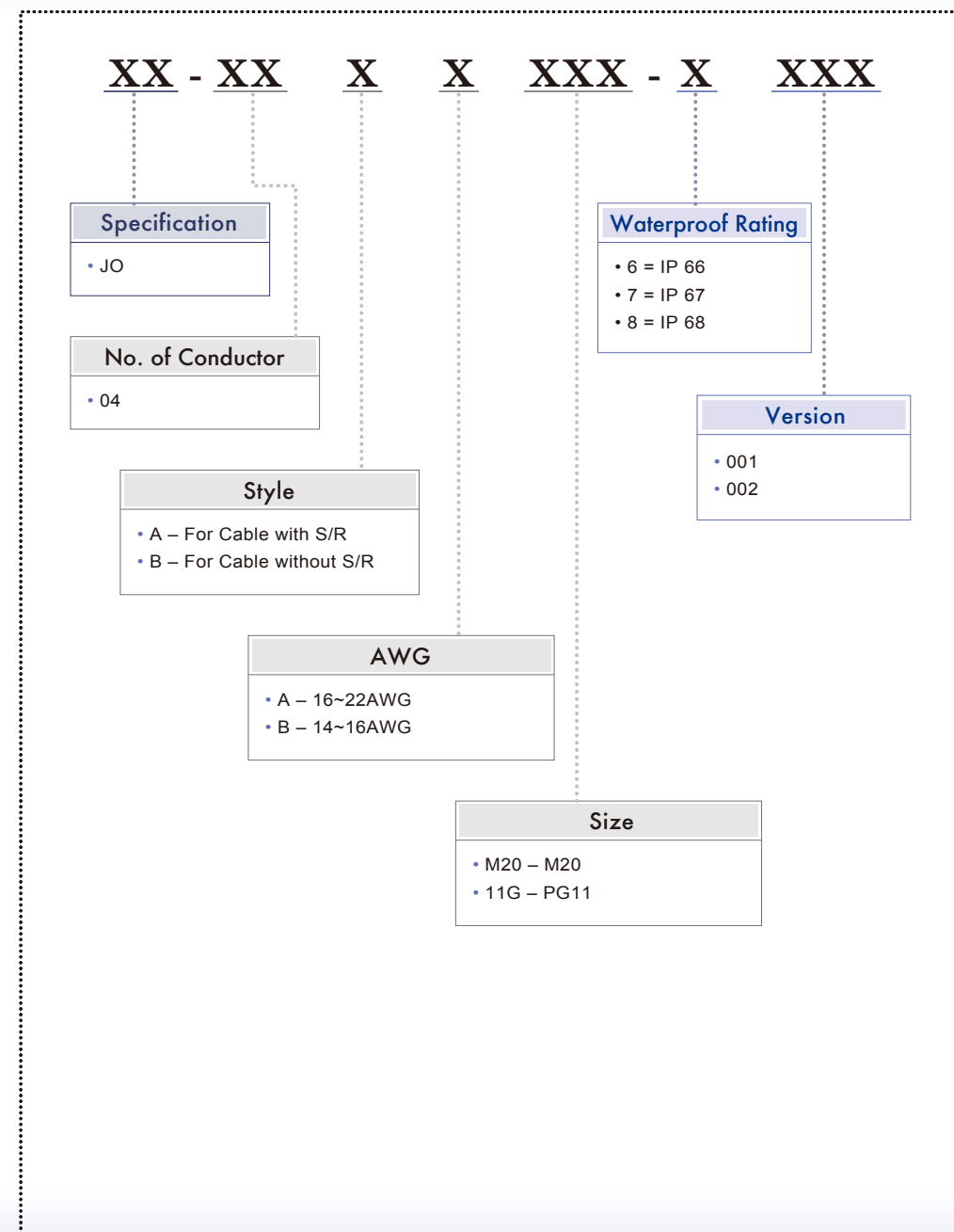
7 Box Series: Aluminum Rectangular (AP-02)

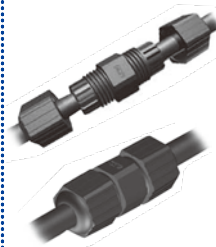
Choose Option		Fetures	Accessories
CASING	P/N	SUGGESTED CONNECTOR (NOT INCL.)	
 	LTWAP-ODU-M00002	FRONT: - No Connection - IP 65	
		REAR: - No Connection - IP 65	
 	LTWAP-ODU-M01002	FRONT: - RJ45 × 1 pc - IP 65	
		REAR: - N BH Jack × 1 pc - IP 65	
 	LTWAP-ODU-M02002	FRONT: - RJ45 × 1 pc and N BH Jack to U.FL × 1 pc - IP 65	
		REAR: - N BH Jack × 1 pc - IP 65	
 	LTWAP-ODU-M03002	FRONT: - RJ45 × 2 pcs and N BH Jack to U.FL × 1 pc - IP 65	
		REAR: - No Connection - IP 65	

Box Series: Aluminum Square (AP-03, 04, 06, 07) 8

Choose Option		Fetures	Accessories
CASING	P/N	SUGGESTED CONNECTOR (NOT INCL.)	
 	LTWAP-ODU-00000 FEATURES: - M (Metal Upper Cover) or P (Plastic Upper Cover) 3, 6 (AP-03, 06) Unpainted or 4, 7 (AP-04, 07) Painted - A (Adaptor) - C (with Cable)	FRONT: - No Connection - IP 67	
		REAR: - No Connection - IP 67	
 	LTWAP-ODU-01000 FEATURES: - M (Metal Upper Cover) or P (Plastic Upper Cover) 3, 6 (AP-03, 06) Unpainted or 4, 7 (AP-04, 07) Painted - A (Adaptor) - C (with Cable)	FRONT: - RJ45 × 1 pc - IP 67	
		REAR: - N BH Jack × 1 pc - IP 67	
 	LTWAP-ODU-02000 FEATURES: - M (Metal Upper Cover) or P (Plastic Upper Cover) 3, 6 (AP-03, 06) Unpainted or 4, 7 (AP-04, 07) Painted - A (Adaptor) - C (with Cable)	FRONT: - RJ45 × 1 pc and N BH Jack to U.FL × 1 pc - IP 67	
		REAR: - N BH Jack × 1 pc - IP 67	
 	LTWAP-ODU-03000 FEATURES: - M (Metal Upper Cover) or P (Plastic Upper Cover) 3, 6 (AP-03, 06) Unpainted or 4, 7 (AP-04, 07) Painted - A (Adaptor) - C (with Cable)	FRONT: - RJ45 × 2 pcs and N BH Jack × 1 pc - IP 67	
		REAR: - No Connection - IP 67	
 	LTWAP-ODU-04000 FEATURES: - M (Metal Upper Cover) or P (Plastic Upper Cover) 3, 6 (AP-03, 06) Unpainted or 4, 7 (AP-04, 07) Painted - A (Adaptor) - C (with Cable)	FRONT: - RJ45 × 2 pcs and N BH Jack × 2 pcs - IP 67	
		REAR: - No Connection - IP 67	

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWJBOX-A001 FEATURES: • A Size: 130 × 130 × 75 • 001 with Knockout Hole • UV Resistant Up to 300 Hours (Max.) • Temperature Range: -40°C to +85°C • IP 67			M8, M12, M16, M20, M25, M32, M40, PG7, PG9, PG11, PG13.5, PG16, PG29



Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWCX-04BAM20-7001 FEATURES: • M20, 2 to 4 Conductor • Field Installable • Wiring Gauge 16~22AWG • Cable Range: Ø10mm, Ø6.2mm • UV Resistant • Temperature Range: -40°C to +85°C • IP 67			

SPECIFICATIONS

No.	Specifications	Standard Value
01. Identifications		Cable Gland
02. Description		Field Installable
03. Thread Style		M8, M12, M16, M20, M25, M32, M40, E20 PG7, PG9, PG11, PG13.5, PG16, PG29
04. Materials		Connector Body: Nylon 66, UL Recognized UV Resistant
05. Temperature Range		-40°C to +105°C
06. Waterproof Rating		IP68

Long Type	Thread Style	Cable OD	Panel Thickness	Length (With SR)	Length (Without SR)	IP	
	With SR	M12	Ø4.5 ~ Ø6.5mm	Max 3.0mm	60.0mm	30.0mm	68
	M16	Ø6 ~ Ø10mm	Max 7.5mm	78.0mm	45.0mm	68	
	M20	Ø10 ~ Ø14mm	Max 6.2mm	86.6mm	43.7mm	68	
	M25	Ø13 ~ Ø18mm	Max 6.2mm	96.0mm	52.1mm	68	
	M32	Ø16 ~ Ø22mm or Ø18 ~ Ø25mm	Max 6.0mm		52.5mm	68	
	M40	Ø20 ~ Ø25mm or Ø24 ~ Ø32mm	Max 9.0mm		60.0mm	68	
	Without SR	PG7	Ø4.5 ~ Ø6.5mm	Max 3.0mm	60.0mm	30.0mm	68
	PG9	Ø6 ~ Ø10mm	Max 7.5mm	78.0mm	45.0mm	68	
	PG11	Ø6 ~ Ø10mm	Max 6.0mm	79.1mm	48.3mm	68	
	PG13.5	Ø10 ~ Ø14mm	Max 6.2mm	86.6mm	49.6mm	68	
	PG16	Ø6.5mm (for RJ) or Ø10 ~ Ø14mm	Max 4.5mm (for RJ) or Max 6.0mm	86.6mm	49.6mm or 49.85mm (for RJ)	68	
	PG29	Ø16 ~ Ø22mm or Ø18 ~ Ø25mm	Max 6.0mm		52.5mm	68	

Short Type	Thread Style	Cable OD	Panel Thickness	Length (With SR)	Length (Without SR)	IP
	With SR	M8	Ø2.5~Ø3mm		22.0mm	67
	M16	Ø6~Ø10mm	Max 3.0mm		40.0mm	68
	M20	Ø10~Ø14mm	Max 6.2mm	79.6mm	36.7mm	68
	M25	Ø13~Ø18mm	Max 6.2mm	89.0mm	45.0mm	68
	Without SR	M32	Ø16~Ø22mm or Ø18~Ø25mm	Max 6.0mm	47.5mm	68
	PG16	Ø5.5~Ø7.5mm (for RJ) or Ø10~Ø14mm			44.6mm or 45.0mm (for RJ)	68
	E20	Ø5.5~Ø7mm or Ø7.8~Ø9.3mm	Max 5.0mm		40.0mm	68

XXX - XX X X X X - X X X XXX

Number of Contacts

- 02, 03, Pin

Style

- A – For Cable with S/R
- B – For Cable without S/R
- P – For Panel Front Mounting
- R – For Panel Rear Mounting

Connector Style

- M – Male Connector
- F – Female Connector

Specification

- AD – Mini Size Current Rating 5A
- ASD – Mini Size Shield Current Rating 5A
- ASU – Mini Size Shield Current Rating 2A
- AU – Mini Size Current Rating 2A
- BB – Standard Size Current Rating 10A
- BBD – Standard Size Current Rating 10A+5A
- BD – Standard Size Current Rating 5A
- BDU – Standard Size Current Rating 5A+2A
- BSD – Standard Size Shield Current Rating 5A
- BSU – Standard Size Shield Current Rating 2A
- BSB – Standard Size Shield Current Rating 10A
- BU – Standard Size Current Rating 2A
- CB – Middle Size Current Rating 10A
- CBU – Middle Size Current Rating 10A+2A
- CBD – Middle Size Current Rating 10A+5A
- CC – Middle Size Current Rating 20A
- CD – Middle Size Current Rating 5A
- CDU – Middle Size Current Rating 5A+2A
- CU – Middle Size Current Rating 2A
- DC – Large Size Current Rating 20A
- DCD – Large Size Current Rating 20A+5A
- DD – Large Size Current Rating 5A
- DU – Large Size Current Rating 2A
- DSD – Large Size Shield Current Rating 5A
- ED – Macro Size Current Rating 5A
- GBD – Dimension Between B & C – 10A + 5A

Waterproof Rating

- 6 = IP 66
- 7 = IP 67
- 8 = IP 68

Back Shell

- L – Straight
(180° For Cable Type)
- R – Right Angle
(90° For Cable Type)
- C – Circular
(For Panel Type)
- S – Square
(For Panel Type)

Mating Style

- L – Two Point Lock
- S – Screw
- Q – Quick
- T – Three Point Lock

Version

- 000 : Phantom
- Without Cable
001, 002,.....
- For Cable
A01 - 1M ~ A99 - 99M
- A - UL2464 Cable

Assembly Style

- M – Molding Type
- A – Assembly Type
- S – Solder Type
- P – 180° PCB Type
- R – 90° PCB Type
- B – Screw in Type

Contact Type

- M – Male
- F – Female
- C – Combo
- D – Female Power + Male Signal
- E – Male Power + Female Signal

SPECIFICATIONS

No.	Specifications	Standard Value
01. Identifications	A Size (Mini Size: 7/16"–28UNS) B Size (Standard Size: 5/8"–27UNS) C Size (Middle Size: 13/16"–28UN) D Size (Large Size: 1"–20UNEF) E Size (Macro Size: 1 3/16"–20UN)	
02. Description	Panel Mount, Molded with Cable and Field Installable	
03. Current Rating / Pin Arrangements	A Size (Mini): 2A: 4 to 6, 5A: 2 and 3 B Size (Standard): 2A: 10 or 12, 5A: 2 to 8, 10A: 2 to 4, 5A+2A: 8, 10A+5A: 6 C Size (Middle): 2A: 18, 5A: 7 to 14, 10A: 4 to 6, 20A: 3, 5A+2A: 12 or 14, 10A+5A: 8 D Size (Large): 2A: 20 to 22, 5A: 18, 20A: 2 to 7 E Size (Macro): 5A: 31	
04. Material	Contacts: Copper Alloy, Gold Plated Connector Body: Nylon + GF, UL Recognized	
05. Temperature Range	Cable: -20°C to +80°C Connector Body: -40°C to +105°C	
06. Waterproof Rating	IP66, IP67 or IP68 (Per IEC60590)	
07. Contact Resistance	≤10mΩ	
08. Insulation Resistance	≥100mΩ at DC 500V	
09. Durability	1000 Plug / Unplug Cycles Minimum	
10. Breakdown Voltage	≥AC 1000V / 1 Minute, ≥500V / 1 Minute (1.5~5A)	
11. Corrosion	48 Hours Salt Spray Contact	
12. Standard Cable Length (for Molded Cable)	1, 2, 5, 10M (Standard Cable: UL2464 PVC Jacket)	

CONTACT PIN ARRANGEMENT

A Size (Mini Size)	 2A:4  2A:5  2A:6  5A:3  5A:2
B Size (Standard Size)	 2A:10  2A:12  5A:2  5A:2  5A:3  5A:3  5A:4  5A:4  5A:4
	 5A:5  5A:5  5A:5  5A:6  5A:6  5A:7  5A:8  10A:2  10A:2
	 10A:3  10A:3  10A:4  5A+2A:8  10A+5A:6
C Size (Middle Size)	 2A:18  5A:7  5A:7  5A:8  5A:8  5A:9  5A:9  5A:10
	 5A:12  5A:14  10A:4  10A:4  10A:5  10A:5  10A:6  10A:6
	 20A:2  20A:3  5A+2A:12  5A+2A:14  10A+5A:8  10A+5A:8
D Size (Large Size)	 2A:20  2A:21  2A:22  2A:23  5A:18  5A:18
	 20A:2  20A:3  20A:4  20A:5  20A:6  20A:7
E Size (Macro Size)	 5A:31
 2A  5A  10A  20A  Male Connector (Female or Male Pin)  Female Connector (Female or Male Pin)	

Panel (Chassis) Mount		Mating Parts	Accessories
CONNECTOR	FEATURE	CONNECTOR	CONNECTOR
PLASTIC 	Pin: • 2A: 4 to 6 • 5A: 2 and 3 Mating Style: • Screw (Thread) Rear or Front Mounting • Lock (Bayonet) Rear or Front Mounting Assembly Style: • PCB 180° (P) or Solder (S)	 With SR	 Waterproof Cap with Rubber Lead
		 Without SR	 Waterproof Cap with Rubber Lead
		 Field Installable	 Waterproof Cover with Chain
METAL 	Pin: • 2A: 4 to 6 • 5A: 2 and 3 Mating Style: • Lock (Bayonet) Front Mounting Assembly Style: • PCB 180° (P) or Solder (S)	 With SR	 T Cable
		 Without SR	 T Adaptor
		 Field Installable	 Extension Cord

Panel (Chassis) Mount		Mating Parts	Accessories
CONNECTOR	FEATURE	CONNECTOR	CONNECTOR
PLASTIC 	Pin: • 2A: 10 or 12 • 5A: 2 to 8 • 10A: 2 to 4 • 5A + 2A: 8 • 10A + 5A: 6 Mating Style: • Screw (Thread) Rear or Front Mounting • Lock (Bayonet) Rear or Front Mounting Assembly Style: • PCB 180° (P) or PCB 90° or Solder (S)	 With SR	 Waterproof Cap with Rubber Lead
		 Without SR	 Waterproof Cap with Rubber Lead
		 Field Installable	 Waterproof Cover with Chain
METAL 	Pin: • 2A: 10 • 5A: 4 to 8 Mating Style: • Screw (Thread) Rear or Front Mounting Assembly Style: • PCB 180° (P) or Solder (S)	 Without SR	 T Cable
		 Without SR	 T Adaptor
		 Field Installable	 T Adaptor
			 Extension Cord
			 Tool

Panel (Chassis) Mount		Mating Parts	Accessories
CONNECTOR	FEATURE	CONNECTOR	CONNECTOR
PLASTIC 	<u>Pin:</u> 2A: 18 5A: 7 to 10, 12, 14 10A: 4 to 6 20A: 3 5A + 2A: 12 or 14 10A + 5A: 8 <u>Mating Style:</u> - Screw (Thread) Rear or Front Mounting - Lock (Bayonet) Rear or Front Mounting <u>Assembly Style:</u> - PCB 180° (P) or Solder (S)	 With SR	 Waterproof Cap with rubber Lead
		 Without SR	 Waterproof Cap with rubber Lead
		 Field Installable	 Waterproof Cover with Chain Tool

Panel (Chassis) Mount		Mating Parts	Accessories
CONNECTOR	FEATURE	CONNECTOR	CONNECTOR
PLASTIC 	<u>Pin:</u> 2A: 18, 20 to 22 5A: 18 10A: 2 to 7 20A + 5A: 12 <u>Mating Style:</u> - Screw (Thread) Rear or Front Mounting - Lock (Bayonet) Rear or Front Mounting <u>Assembly Style:</u> - PCB 180° (P) or Solder (S)	 With SR	 Waterproof Cap with rubber Lead
		 Field Installable (Screw-In Termination Contacts Are Available)	 Waterproof Cap with rubber Lead
METAL 	<u>Pin:</u> 5A: 18 <u>Mating Style:</u> - Screw (Thread) Front Mounting <u>Assembly Style:</u> - PCB 180° (P) or Solder (S)	 Without SR	 Waterproof Cover with Chain
		 Without SR	 Tool

21 Circular E Size (Macro Size)

Panel (Chassis) Mount		Mating Parts	Accessories
CONNECTOR	FEATURE	CONNECTOR	
PLASTIC 	<u>Pin:</u> 5A: 31 <u>Mating Style:</u> - Lock (Bayonet) Front Mounting <u>Assembly Style:</u> - PCB 180° (P) or Solder (S)	 With SR	

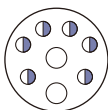
Circular Connector: 3 Points Lock 22

SPECIFICATIONS

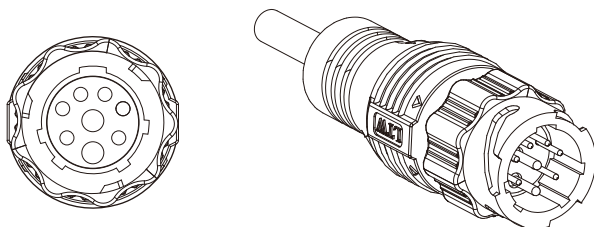
No.	Specifications	Standard Value
01. Identifications		G Size
02. Description		Panel Mount, Molded with Cable
03. Current Rating / Pin Arrangements		5A: 6 + 10A: 2
04. Material		Contacts: Copper Alloy Gold Plated Connector Body: PBT + PC
05. Temperature Range		Connector: -40°C to +105°C Cable: -20°C to +105°C
06. Waterproof Rating		IP67, IP68
07. Contact Resistance		≤10mΩ
08. Insulation Resistance		≥100MΩ at DC 500V
09. Flame Test		UL94 V-0
10. Breakdown Voltage		≥AC 1000V / 1 Minute
11. Corrosion		48 Hours Salt Spray Contact
12. Standard Cable Length (for Molded Cable)		1, 2, 5, 10M

CONTACT PIN ARRANGEMENT

10A+5A



What “3 Points Lock” is?



Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWGBD-08/FFM-TL/AXX FEATURES: • 3 Point Lock • 180° In-line Molded Type • △ With or without SR • PVC Cable • △ IP 67 or IP 68 • 10A+5A: 8		LTWGBD-08/MMM-TL/AXX FEATURES: • 3 Point Lock • 180° In-line Molded Type • △ With or without SR • PVC Cable • △ IP 67 or IP 68 • 10A+5A: 8	
	LTWGBD-08/MMM-TL/AXX FEATURES: • 3 Point Lock • 180° In-line Molded Type • △ With or without SR • PVC Cable • △ IP 67 or IP 68 • 10A+5A: 8		LTWGBD-08/FFM-TL/AXX FEATURES: • 3 Point Lock • 180° In-line Molded Type • △ With or without SR • PVC Cable • △ IP 67 or IP 68 • 10A+5A: 8	

SPECIFICATIONS

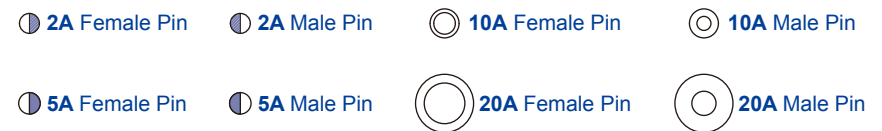
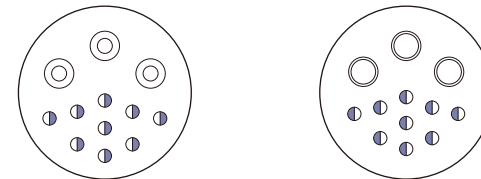
No.	Specifications	Standard Value
01. Identifications		C Size (Middle: 13/16"–28UN) D Size (Large: 1"–20UNEF)
02. Description		Panel Mount, Molded with Cable and Field Installable
03. Current Rating / Pin Arrangements		2A: 5 + 10A: 3 5A: 9 + 20A: 3
04. Material		Contacts: Copper Alloy Gold Plated Connector Body: PA
05. Temperature Range		Connector: -40°C to +105°C Cable: -20°C to +80°C
06. Waterproof Rating		IP67
07. Contact Resistance		≤10mΩ
08. Insulation Resistance		>100MΩ at DC 500V
09. Flame Test		UL94V-0
10. Breakdown Voltage		≥AC 1000V / 1 Minute
11. Corrosion		48 Hours Salt Spray Contact
12. Standard Cable Length (for Molded Cable)		1, 2, 5, 10M

CONTACT PIN ARRANGEMENT

C Size 10A+2A



D Size 20A+5A



Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 LTWDCD-12PME  LC7001 FEATURES: • Bayonet Lock •  Solder or PCB Contacts • Front Mounting • IP 67 • 20A(3)+5A(9)		 LTWDCD-12  FDM-LL7AXX FEATURES: • Bayonet Lock • 180° In-line Molded Type •  With or without SR • PVC Cable • IP 67 • 20A(3)+5A(9)		
		 LTWDCD-12  FDM-LR7AXX FEATURES: • Bayonet Lock • 90° In-line Molded Type •  With or without SR • PVC Cable • IP 67 • 20A(3)+5A(9)		
 LTWDCD-12PMD  LC7001 FEATURES: • Bayonet Lock •  Solder or PCB Contacts • Front Mounting • IP 67 • 20A(3)+5A(9)		 LTWDCD-12  FEM-LL7AXX FEATURES: • Bayonet Lock • 180° In-line Molded Type •  With or without SR • PVC Cable • IP 67 • 20A(3)+5A(9)		
		 LTWDCD-12AFEM-LR7AXX FEATURES: • Bayonet Lock • 90° In-line Molded Type • With SR • PVC Cable • IP 67 • 20A(3)+5A(9)		

Male Connector		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 LTWDCD-12AMD LL7AXX FEATURES: • Bayonet Lock • 180° In-line Molded Type • With SR • PVC Cable • IP 67 • 20A(3)+5A(9) Contacts			LTWDCD-12AFEM-LL7AXX FEATURES: • Bayonet Lock, • 180° In-line Molded Type • With or without SR • PVC Cable • IP 67 • 20A+5A: 12	
			LTWDCD-12AFEM-LR7AXX FEATURES: • Bayonet Lock, • 90° In-line Molded Type • With SR • PVC Cable • IP 67 • 20A+5A: 12	
 LTWDCD-12AM LL7AXX FEATURES: • Bayonet Lock • 180° In-line Molded Type • With SR • PVC Cable • IP 67 • 10A(3)+2A(5) Contacts			LTWDCD-12AFDM-LL7AXX FEATURES: • Bayonet Lock, • 180° In-line Molded Type • With or without SR • PVC Cable • IP 67 • 20A+5A: 12	
			LTWDCD-12AFDM-LR7AXX FEATURES: • Bayonet Lock, • 90° In-line Molded Type • With SR • PVC Cable • IP 67 • 20A+5A: 12	

Panel (Chassis) Mount		Mating Parts of 1 & 2		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	1 LTWCBU-12PMD△-TC7001 FEATURES: • 3 Point Lock • △ Solder or PCB Contacts • Front Mounting • IP 67 • 10A(3)+2A(5) Contacts		LTWCBU-08△FEM-T△7AXX FEATURES: • 3 Point Lock • △ With or without SR • △ 180° or 90° In-line • Molded Type • PVC Cable • IP 67 • 10A(3)+2A(5) Contacts	
	2 LTWCBU-08PME△-TC7001 FEATURES: • Three Point Lock, • △ Solder or PCB Contacts • Front Mounting • IP 67 • 10A(3)+2A(5) Contacts		LTWCBU-08△FDM-T△7AXX FEATURES: • 3 Point Lock • △ With or without SR • △ 180° or 90° In-line • Molded Type • PVC Cable • IP 67 • 10A(3)+2A(5) Contacts	

XX XX - XX X X X X - X X X XXX

Size

- 12, 16, 17, 20, 23, 24, 28, 32...

Number of Contacts

- 02, 03, 04, 05..... Pin

Style

- A – For Cable with S/R
- B – For Cable without S/R
- D – With Ground Pin
- P – For Panel Rear Mounting with Screw
- R – For Panel Rear Mounting With Nut

Connector Style

- M – Male Connector
- F – Female Connector

Contact Type

- M – Male
- F – Female
- C – Combo

Specification

- HB – Metal, Salt Spray Test 500H ,10A
- LB – Metal, Salt Spray Test 48H ,10A
- HC – Metal, Salt Spray Test 500H ,20A
- LC – Metal, Salt Spray Test 48H ,20A
- HD – Metal, Salt Spray Test 500H ,5A
- LD – Metal, Salt Spray Test 48H ,5A
- HU – Metal, Salt Spray Test 500H ,3A
- LU – Metal, Salt Spray Test 48H ,3A
- LJ – Metal, Salt Spray Test 48H ,28A
- PL – Push Lock
- MA – MIX

Back Shell

- L – Straight (180° For Cable Type)
- R – Right Angle (90° For Cable Type)
- C – Circular (For Panel Type)
- S – Square (For Panel Type)
- F – Front Hexagonal (For Panel Type)

Waterproof Rating

- 0 = Non-Waterproof
- 6 = IP 66
- 7 = IP 67
- 8 = IP 68

Mating Style

- L – 2 Points Lock
- S – Screw
- Q – Quick
- T – 3 Points Lock

Version

- 000 : Phantom
- Without Cable 001, 002,.....
- For Cable A01 - 1M ~ A99 - 99M

Assembly Style

- M – Molding Type
- A – Assembly Solder Type
- C – Assembly Crimp Type
- S – Solder Type
- P – 180° PCB Type
- R – 90° PCB Type
- B – Screw in Type

SPECIFICATIONS

No.	Specifications	Standard Value
01. Identifications		Push Lock 12 Size
02. Description		Assembly Type, Panel Mount
03. Current Rating / Pin Arrangements		5A: 2 to 4
04. Material		Contacts: Copper Alloy Gold Plated Connector Body: Nylon + GF
05. Temperature Range		Connector: -40°C to +105°C
06. Waterproof Rating		IP67
07. Contact Resistance		<10mΩ
08. Insulation Resistance		≥100MΩ at DC 500V
09. Flame Test		UL94V-2
10. Breakdown Voltage		≥AC 1600V / 1 Minute
11. Corrosion		48 Hours Salt Spray Contact

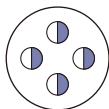
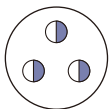
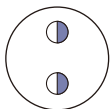
SPECIFICATIONS

No.	Specifications	Standard Value
01. Identifications		20 Size
02. Description		Panel Mount, Assembly Type
03. Current Rating / Pin Arrangements		Current Rating : 5A Pin Arrangements : 10, 12, 14 Contacts Current Rating : 10A Pin Arrangements : 4, 5, 7 Contacts Current Rating : 20A Pin Arrangements : 2, 3 Contacts
04. Light Color		Black / Silver
05. Material		Contacts : Copper Alloy Connector Body : Metal Connector Insulation : Nylon
06. Temperature Range		Connector Body : -25°C to +85°C
07. Waterproof Rating		IP68
08. Contact Resistance		≤5mΩ
09. Insulation Resistance		>1000MΩ at DC 500V
10. Flame Test		UL94V-0
11. Breakdown Voltage		≥AC 1000V / 1 Minute
12. Corrosion		48 and 500 Hours Salt Spray Contact

CONTACT PIN ARRANGEMENT

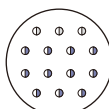
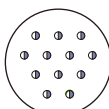
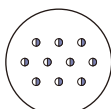
Push Lock Connector

5A

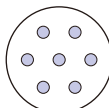
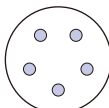
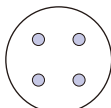


Metallic Connector

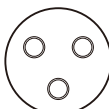
5A



10A

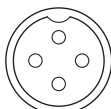


20A



MIX Connector

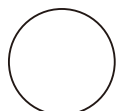
10A



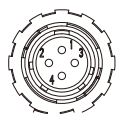
● 5A ● 10A ○ 20A



Male Connector Female Pin



Female Connector Male Pin
Male Connector Female Pin



Female Connector Male Pin

Panel (Chassis) Mount

CONNECTOR

P/N



LTWPL12-ΔBMFA-QL7001

FEATURES:

- Push Lock Type
- 180° In-line Assembly Type
- IP 67
- Δ 5A: 02, 03, 04



LTWPL12-ΔPMFP-QC7001

FEATURES:

- Push Lock Type
- Solder or PCB Contacts
- Front Mounting
- IP 67
- Δ 5A: 02, 03, 04

Mating Parts

CONNECTOR

P/N



LTWPL12-ΔBFMA-QL7001

FEATURES:

- Push Lock Type
- 180° In-line Assembly Type
- IP 67
- Δ 5A: 02, 03, 04



Dust Cap (For Male)

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWLD20-△SMFS-SS8001 FEATURES: • Screw Type, Solder Contacts • Front Mounting • IP 68 • L: Salt Spray Test 48 Hours • △ 5A: 10, 12 and 14		LTWLD20-△BFMA-SL8001 FEATURES: • Assembly Type • IP 68 • Better Cable Retention • △ 5A: 10, 12 and 14	
	LTWLD20-△RMFS-SS8001 FEATURES: • Nut Type, Solder Contacts • Rear Mounting • IP 68 • L: Salt Spray Test 48 Hours • △ 5A: 10, 12 and 14			
	LTWHD20-△SMFS-SS8001 FEATURES: • Screw Type, Solder Contacts • Front Mounting • IP 68 • H: Salt Spray Test 500 Hours • △ 5A: 10, 12 and 14		LTWHD20-△BFMA-SL8001 FEATURES: • Assembly Type • IP 68 • Better Cable Retention • △ 5A: 10, 12 and 14	
	LTWHD20-△RMFS-SS8001 FEATURES: • Nut Type, Solder Contacts • Rear Mounting • IP 68 • H: Salt Spray Test 500 Hours • △ 5A: 10, 12 and 14			

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWLB20-△SMFS-SS8001 FEATURES: • Screw Type, Solder Contacts • Front Mounting • IP 68 • L: Salt Spray Test 48 Hours • △ 10A: 4, 5 and 7		LTWLB20-△BFMA-SL8001 FEATURES: • Assembly Type • Rear Mounting • IP 68 • Better Cable Retention • △ 10A: 4, 5 and 7	
	LTWLB20-△RMFS-SS8001 FEATURES: • Nut Type, Solder Contacts • Rear Mounting • IP 68 • L: Salt Spray Test 48 Hours • △ 10A: 4, 5 and 7			
	LTWHB20-△SMFS-SS8001 FEATURES: • Screw Type, Solder Contacts • Front Mounting • IP 68 • H: Salt Spray Test 500 Hours • △ 10A: 4, 5 and 7		LTWHB20-△BFMA-SL8001 FEATURES: • Assembly Type • Rear Mounting • IP 68 • Better Cable Retention • △ 10A: 4, 5 and 7	
	LTWHB20-△RMFS-SS8001 FEATURES: • Nut Type, Solder Contacts • Rear Mounting • IP 68 • H: Salt Spray Test 500 Hours • △ 10A: 4, 5 and 7			

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWLC20-ΔSMFS-SS8001 FEATURES: • Screw Type, Solder Contacts • Front Mounting • IP 68 • L: Salt Spray Test 48 Hours • Δ 20A: 2 and 3		LTWLC20-ΔBFMA-SL801 FEATURES: • Assembly Type • IP 68 • Better Cable Retention • Δ 20A: 2 and 3	
	LTWLC20-ΔRMFS-SS8001 FEATURES: • Nut Type, Solder Contacts • Rear Mounting • IP 68 • L: Salt Spray Test 48 Hours • Δ 20A: 2 and 3			
	LTWHC20-ΔSMFS-SS8001 FEATURES: • Screw Type, Solder Contacts • Front Mounting • IP 68 • H: Salt Spray Test 500 Hours • Δ 20A: 2 and 3		LTWHC20-ΔBFMA-SL801 FEATURES: • Assembly Type • IP 68 • Better Cable Retention • Δ 20A: 2 and 3	
	LTWHC20-ΔRMFS-SS8001 FEATURES: • Nut Type, Solder Contacts • Rear Mounting • IP 68 • H: Salt Spray Test 500 Hours • Δ 20A: 2 and 3			

XX XX - XX X X X X - X X X XXX

Size

- 12, 16, 17, 20, 23, 24, 28, 32...

Number of Contacts

- 02, 03, 04, 05..... Pin

Style

- A – For Cable with S/R
- B – For Cable without S/R
- D – With Ground Pin
- P – For Panel Rear Mounting with Screw
- R – For Panel Rear Mounting With Nut

Connector Style

- M – Male Connector
- F – Female Connector

Contact Type

- M – Male
- F – Female
- C – Combo

Specification

- HB – Metal, Salt Spray Test 500H ,10A
- LB – Metal, Salt Spray Test 48H ,10A
- HC – Metal, Salt Spray Test 500H ,20A
- LC – Metal, Salt Spray Test 48H ,20A
- HD – Metal, Salt Spray Test 500H ,5A
- LD – Metal, Salt Spray Test 48H ,5A
- HU – Metal, Salt Spray Test 500H ,3A
- LU – Metal, Salt Spray Test 48H ,3A
- LJ – Metal, Salt Spray Test 48H ,28A
- PL – Push Lock
- MA – MIX

Back Shell

- L – Straight (180° For Cable Type)
- R – Right Angle (90° For Cable Type)
- C – Circular (For Panel Type)
- S – Square (For Panel Type)
- F – Front Hexagonal (For Panel Type)

Waterproof Rating

- 0 = Non-Waterproof
- 6 = IP 66
- 7 = IP 67
- 8 = IP 68

Mating Style

- L – 2 Points Lock
- S – Screw
- Q – Quick
- T – 3 Points Lock

Version

- 000 : Phantom
- Without Cable 001, 002,.....
- For Cable A01 - 1M ~ A99 - 99M

Assembly Style

- M – Molding Type
- A – Assembly Solder Type
- C – Assembly Crimp Type
- S – Solder Type
- P – 180° PCB Type
- R – 90° PCB Type
- B – Screw in Type

SPECIFICATIONS

No.	Specifications	Standard Value
01. Identifications		MIX Connector
02. Description		Molded with cable
03. Current Rating / Pin Arrangements		10A : 4
04. Material		Contacts: Copper Alloy,Gold Plated Connector Body: Nylon+GF, UL Recognized
05. Temperature Range		Cable: -20°C to +80°C
06. Waterproof Rating		IP66
07. Contact Resistance		≤10mΩ
08. Insulation Resistance		≥100mΩ at DC 500V
09. Durability		1000 Plug / Unplug Cycles Minimun
10. Breakdown Voltage		≥AC 1000V / 1 Minute
11. Standard Cable Length (for Molded Cable)		1–99M (Standard Cable: UL2464 PVC Jacket)

Male Connector		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWMA17-04BMFM-LL6AXX FEATURES: • 180° Molded with Cable • PVC Cable • Lock Type • 10A: 4 • IP 66 • Equivalent to AMP CPC Series: AMP206430-2		LTWMA17-04BFMM-LL6AXX FEATURES: • 180° Molded with Cable • PVC Cable • Lock Type • 10A: 4 • IP 66 • Equivalent to AMP CPC Series: AMP206429-1	

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWLJ23-06PMMC-SF7001 FEATURES: • Metal; Salt Spray Test 48 Hours; 28A • Front Mounting • Male Connector • Screw Type • Front Hexagonal Backshell • IP 67		LTWLJ23-06DFFC-SL7001 FEATURES: • Metal; Salt Spray Test 48 Hours; 28A • With Ground Pin • Female Connector • Assembly Crimp Type • 180° for Cable Type • IP 67	
	LTWLJ23-06PMFC-SF7001 FEATURES: • Metal; Salt Spray Test 48 Hours; 28A • Front Mounting • Female Connector • Screw Type • Front Hexagonal Backshell • IP 67		LTWLJ23-06DFMC-SL7001 FEATURES: • Metal; Salt Spray Test 48 Hours; 28A • With Ground Pin • Male Connector • Assembly Crimp Type • 180° for Cable Type • IP 67	

XXX - XX X X X X - X X XXX

Number of Contacts

- 09, 15, 25, 26, ...78 Pins

Style

- A – For Cable with S/R
- B – For Cable without S/R
- P – For Panel Front Mounting
- J – For Joint

Connector Style

- M – Male Connector
- F – Female Connector
- N – Not Connector

Contact Type

- M – Male
- F – Female
- N – Not Pin

Specification

- SDB – D-SUB Shielded Connector
- HDB – High Density D-SUB Shielded Connector
- PDB – D-SUB Plastic Connector
- HDP – High Density D-SUB Plastic Connector
- DJ1 – DB 09 Pin HD 15 Pin Joint
- DJ2 – DB 15 Pin HD 26 Pin Joint
- DJ3 – DB 25 Pin HD 44 Pin Joint
- DJ4 – DB 37 Pin HD 62 Pin Joint
- DJ5 – DB 50 Pin HD 78 Pin Joint

Version

- 000 : Phantom
- Without Cable 001, 002,
- For Cable A01 - 1M ~ A99-99M
- A-UL2464 Cable

Waterproof Rating

- 6 = IP 66
- 7 = IP 67
- 8 = IP 68

Back Shell

- L – Straight (180° without Broad Lock)
- R – Right Angle (90° without Broad Lock)
- A – Straight with Board Lock (180° with Board Lock for PCB Panel)
- B – Right Angle with Board Lock (90° with Board Lock for PCB Panel)
- J – With RJ45 Jack

Mating Style

- L – Latch
- S – Screw
- Q – Quick

Assembly Style

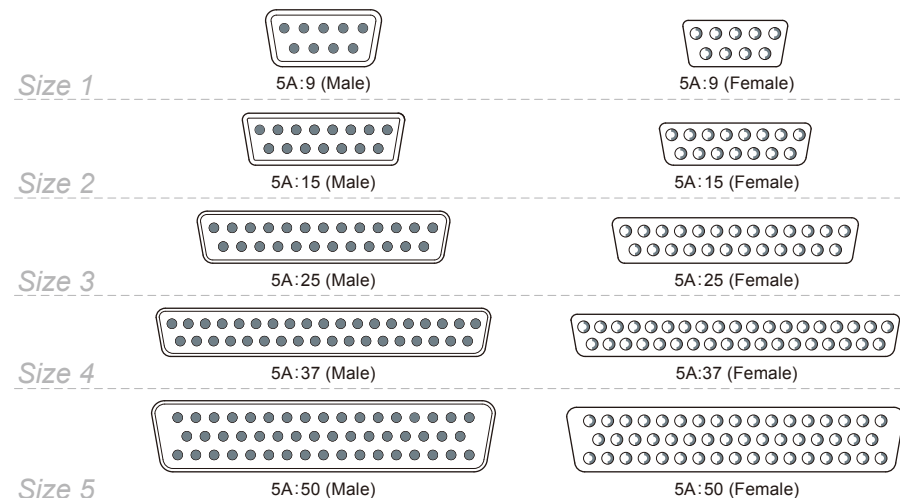
- M – Molding Type
- A – Assembly Type
- S – Solder Type
- P – 180° PCB Type
- C – Crimp Type

SPECIFICATIONS

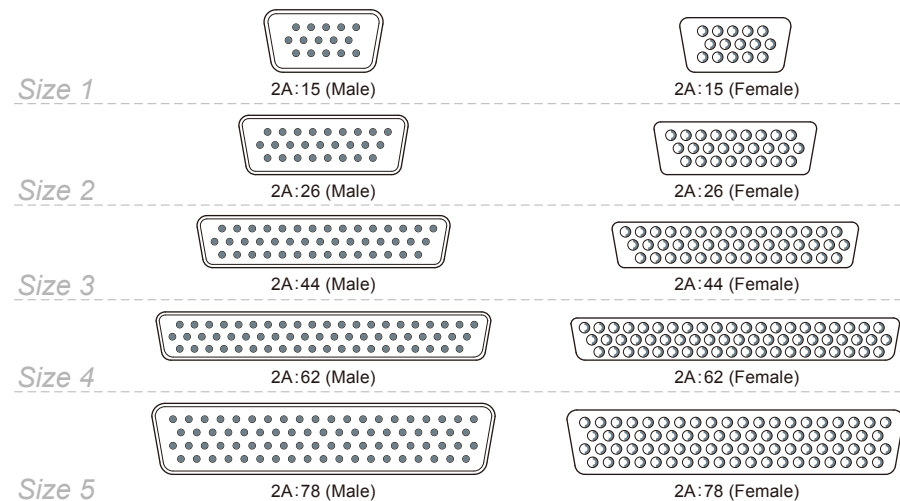
No.	Specifications	Standard Value
01. Identifications		Standard D-Sub Connector High Density D-Sub Connector
02. Description		Panel Mount, Molded with Cable and Field Installable
03. Current Rating / Pin Arrangements		Standard D-Sub: 5A: 9, 15, 25, 37, 50 High Density D-Sub: 2A: 15, 26, 44, 62, 78
04. Material		Contacts: Copper Alloy, Gold Plated Connector Body: Nylon 9T or PBT, UL Recognized Shell: Steel, Nickel Plated
05. Temperature Range		Cable: -20°C to +80°C Connector Body: -40°C to +105°C
06. Waterproof Rating		IP67, IP68
07. Contact Resistance		≤20mΩ
08. Insulation Resistance		≥500mΩ at DC 500V
09. Breakdown Voltage		≥AC 500V / 1 Minute
10. Standard Cable Length (for Molded Cable)		1–99M (Standard Cable: UL2464)
11. Field Installable		All Solder Contacts Unless and Otherwise Indicated

CONTACT PIN ARRANGEMENT

Standard D-SUB

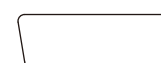


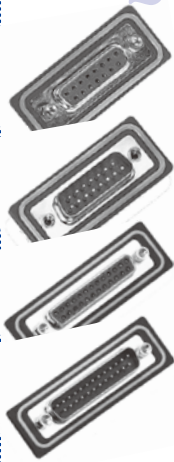
Hi-Density D-SUB



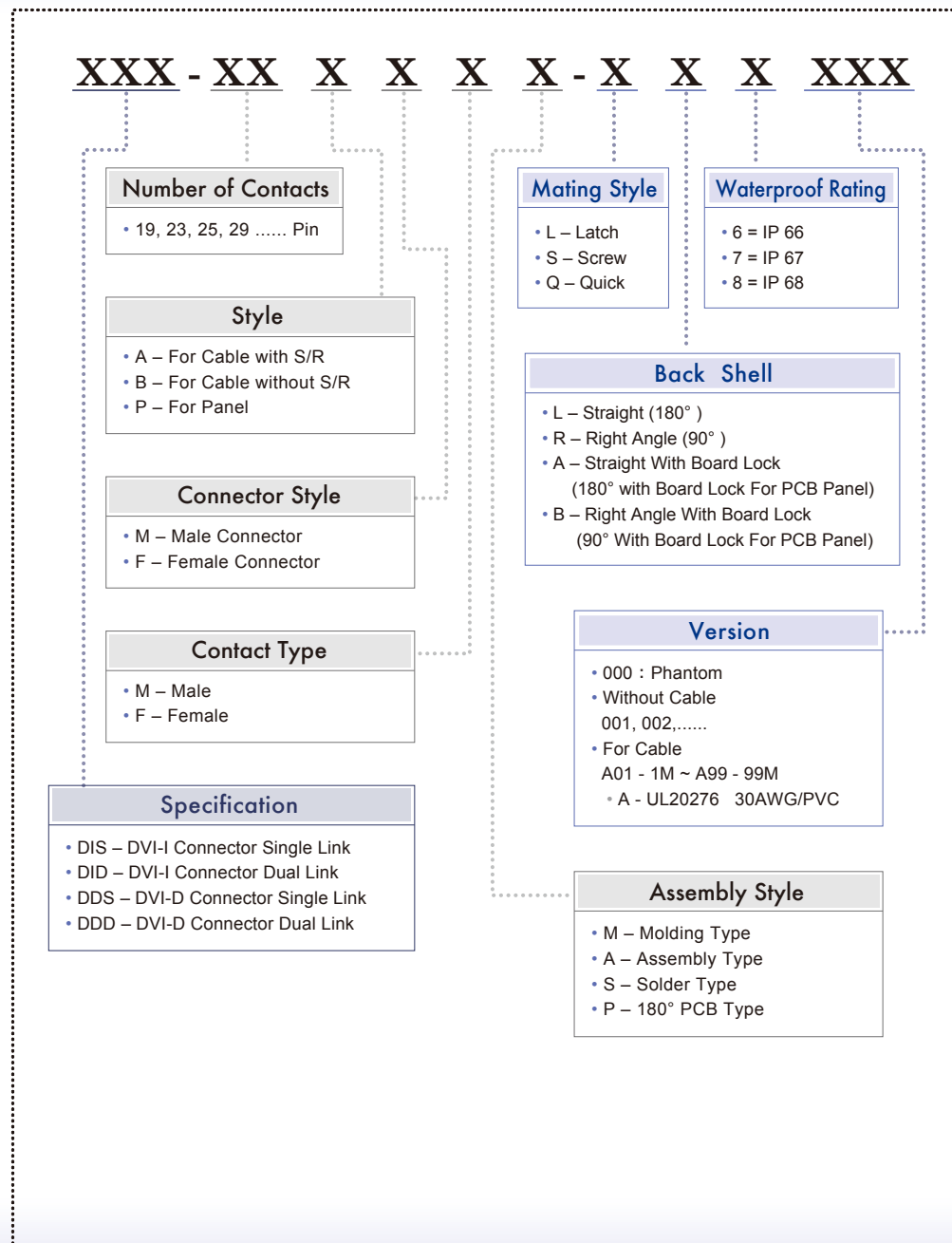
Male: • 2A • 5A

Female: ○ 2A ○ 5A


Male Connector
(Male Pin)

Female Connector
(Female Pin)

Panel (Chassis) Mount		Mating Parts of 1~3	
CONNECTOR	P/N	CONNECTOR	P/N
1 	LTWSDB-15P    FEATURES: • 15 Pins • Push-pull Type • Shielded • IP68 •  Available in FF or MM Style •  Available in PCB or Solder Style •  Available in PCB180°, PCB90°, Straight		LTWSDB-15B   FEATURES: • Without SR • Push-pull Type •  Available in FF or MM Style • Solder Contacts • Field Installable • IP 67
	2 	LTWSDB-A   FEATURES: • Screw Type • Shielded •  Available in 9, 15, 25 and 37 pins •  Available in FF or MM Style •  Available in PCB or Solder Style •  Available in PCB180°, PCB90°, Straight or Right •  Available in IP 67 or IP 68	
3 		LTWSDB-50P   FEATURES: • Screw Type • Shielded • IP 67 •  Available in FF or MM Style •  Available in PCB or Solder Style	
			LTWSDB-50A   FEATURES: • Shielded • Molded with Cable • Screw Type • IP 67 •  Available in FF or MM Style

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
1 	LTWHDB-26P    FEATURES: • 26 Pins • Push-Pull Type • Shielded • IP 68 •  Available in FF or MM Style •  Available in PCB or Solder Style •  Available in PCB180°, PCB90°, Straight or Right		LTWHDB-26B   FEATURES: • Without SR • Push-Pull Type •  Available in FF or MM Style • Solder Contacts • Field Installable	
			• Only for I	
2 	LTWHDB-A     FEATURES: • Screw Type • Shielded •  Available in 15, 26, 44 and 62 pins •  Available in FF or MM Style •  Available in PCB or Solder Style •  Available in PCB180°, PCB90°, Straight or Right •  Available in IP67 or IP68		LTWHDB-A    FEATURES: • Shielded • Screw Type • Molded with Cable • IP 67 •  Available in 15, 26, 44, and 62 Pins •  Available in FF or MM Style	
			• Only for 2 and 3	
3 	LTWHDB-78P   FEATURES: • Screw Type • Shielded • IP 67 •  Available in FF or MM Style •  Available in PCB or Solder Style		LTWHDB-B    FEATURES: • Screw Type • Shielded • Field Installable • IP 67 •  Available in 15, 26, and 44 Pins •  Available in FF or MM Style •  Available in Solder or Crimp Contacts	
			• Only for 2 and 3	
			LTWHDB-78A   FEATURES: • Shielded • Molded with Cable • Screw Type • IP 67 •  Available in FF or MM Style	
			• Only for 2 and 3	

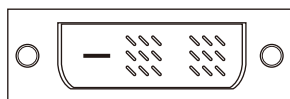


SPECIFICATIONS

No.	Specifications	Standard Value
01. Identifications		DVI-D Single Link (DDS) DVI-D Dual Link (DDD) DVI-I Single Link (DIS) DVI-I Dual Link (DID)
02. Description		Panel Mount, Molded with Cable
03. Pin Arrangements		DVI-D Single Link (DDS): 19 Contacts DVI-D Dual Link (DDD): 25 Contacts DVI-I Single Link (DIS): 23 Contacts DVI-I Dual Link (DID): 29 Contacts
04. Material		Contacts: Copper Alloy, Gold Plated Connector Body: Nylon + GF , UL Recognized Shell: Steel, Nickel Plated
05. Temperature Range		Cable: -20°C to +80°C Connector Body: -20°C to +85°C
06. Waterproof Rating		IP67
07. Contact Resistance		≤20mΩ
08. Insulation Resistance		≥1000mΩ at DC 500V
09. Standard Cable Length (for Molded Cable)		1–5M (Standard Cable: UL20276 28 AWG / PVC)

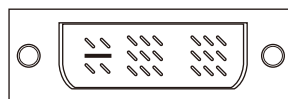
CONTACT PIN ARRANGEMENT

DVI-D Single Link (DDS)



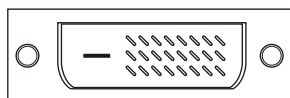
19 Contacts

DVI-I Single Link (DIS)



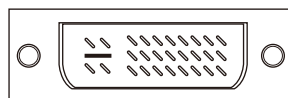
23 Contacts

DVI-D Dual Link (DDD)



25 Contacts

DVI-I Dual Link (DID)



29 Contacts

Panel (Chassis) Mount		Mating Parts	
CONNECTOR	P/N	CONNECTOR	P/N
	LTWDDS-19PFFS-SL8001 LTWDDD-25PFFS-SL8001 FEATURES: • DVI-D Single 19 Contacts or DVI-D Dual 25 Contacts • Screw Type • IP 68	 With SR	LTWDDS-19AMMM-SL7AXX LTWDDD-25AMMM-SL7AXX FEATURES: • DVI-D Single 19 Contacts or DVI-D Dual 25 Contacts • Screw Type • In-line Molded Type • With SR • IP 67
		 With SR	

Panel (Chassis) Mount		Mating Parts	
CONNECTOR	P/N	CONNECTOR	P/N
	LTWDIS-23PFFS-SL8001		LTWDIS-23AMMM-SL7AXX
	LTWDID-29PFFS-SL8001		LTWDID-29AMMM-SL7AXX
	FEATURES: • DVI-I Single 23 Contacts or DVI-I Dual 29 Contacts • Screw Type • IP 68		FEATURES: • DVI-I Single 23 Contacts or DVI-I Single 29 Contacts • Screw Type • In-line Molded Type • With SR • IP 67

XXX - XX X XX X - X X X XXX

Cat

- SM = Single - Mode
- MM = Multi - Mode
- 00

Style

- A – For Cable with S/R
- B – For Cable without S/R
- P – For Panel Front Mounting
- R - For Panel Rear Mounting

Connector Style

- LM – LC Type Plug Connector
- LF – LC Type Jack Connector

Assembly Style

- M – Molding Type
- A – Assembly Type
- J – Jack

Specification

- FB – Fiber Optic Connector

Mating Style

- L – Lock
- S – Screw
- Q – Quick

Waterproof Rating

- 6 = IP 66
- 7 = IP 67
- 8 = IP 68

Back Shell

- L – Straight (180°)
- R – Right Angle (90°)
- C – Circular (For Panel Type)
- S – Square (For Panel Type)

Version

- 000 : phantom
- Without Cable 001, 002,
- For Cable A01 - 1M ~ A99-99M

Panel (Chassis) Mount		Mating Parts	
CONNECTOR	P/N	CONNECTOR	P/N
	LTWFB-00RLFJ-LC7001 FEATURES: • LC Type Jack Connector • Rear Mounting • Lock Type • Circular Flange • IP 67		LTWFB-00BLMA-LL7001 FEATURES: • LC Type Plug Connector • Assembly Type • 180° Lock Type • IP 67

XXX - XX X X X X - X X X

Specification

- HJ – HDMI Jack
- HP – HDMI Plug

HDMI

- 19 – 19 Pins

Style

- A – For Cable with S/R
- B – For Cable without S/R
- P – For Panel

Connector Style

- M – Male Connector
- F – Female Connector

Contact Type

- M – Male Connector
- F – Female Connector

Assembly Style

- M – Molding Type
- A – Assembly Type
- S – Solder Type
- P – 180° PCB Type
- R – 90° PCB Type

Version

- 000 : phantom
- Without Cable
001, 002,
- For Cable
A01 - 1M ~ A05-05M
• A – UL2464 Cable

Waterproof Rating

- 6 = IP 66
- 7 = IP 67
- 8 = IP 68

Back Shell

- L – Straight
(180° For Cable Type)
- R – Right Angle
(90° For Cable Type)
- C – Circular
(For Panel Type)
- S – Square
(For Panel Type)

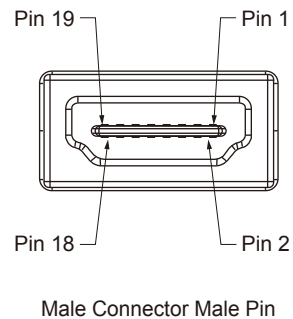
Mating Style

- L – Lock
- S – Screw
- Q – Quick

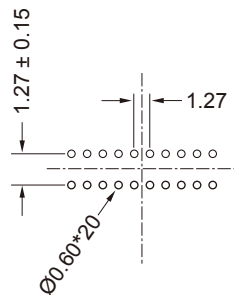
PIN ARRANGEMENTS/PCB LAYOUT

19 Contacts

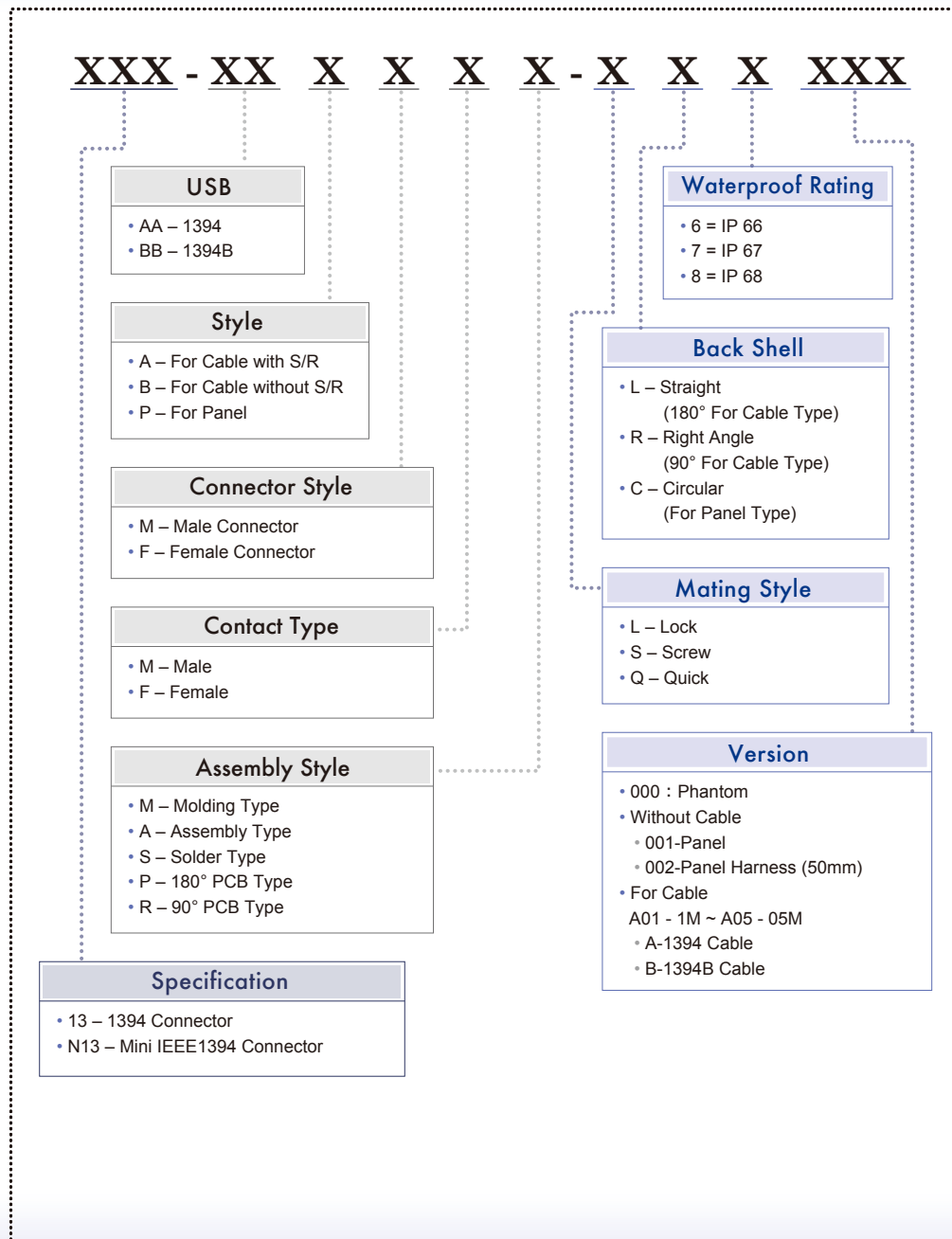
Male



PCB



Panel (Chassis) Mount		Mating Parts	
CONNECTOR	P/N	CONNECTOR	P/N
	LTWHJ-19PFFR-QS7001 FEATURES: • Latch Type • 90° PCB • IP 67		LTWHP-19AMMM-QL7AXX FEATURES: • 180° In-line Molded Type • With SR • Maximum Cable Length 5M (Cable Specification HDMI 1.3) • IP 67



CONTACT PIN ARRANGEMENT

No.	Specifications	Standard Value
01. Identifications		IEEE 1394 Connector
02. Description		Panel Mount, Molded with Cable and Field Installable
03. Current Rating		0.5A
04. Material		Contacts: Copper Alloy, Gold Plated Connector Body: PBT UL94V-0
05. Temperature Range		-20°C to +80°C
06. Waterproof Rating		IP67, IP68
07. Contact Resistance		≤30mΩ Max
08. Insulation Resistance		≥100mΩ at DC 500V
09. Breakdown Voltage		≥AC 500V / 1 Minute
10. Standard Cable Length (for Molded Cable)		1, 2, 4M (IEEE1394 Cable)

Panel (Chassis) Mount		Mating Parts of 1~3		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
1 	LTW13-AAPMFP-SC8001 FEATURES: • Male Connector • PCB 180° • P68			 Waterproof Cover with Chain
2 	LTW13-AAAMFM-SL7AXX FEATURES: • Male Connector • Molded with Cable • With SR • Cable Length 1 to 4 Meters • IP 67		LTW13-AABFMM-SL7AX FEATURES: • Female Connector • Molded with Cable • Without SR • IP 67 • Cable Length 1 to 4 Meters	 Waterproof Cover with Rubber Lead
3 	LTW13-AABMFA-SL8001 FEATURES: • Male Connector • Field Installable • Without Cable • IP 68			 Waterproof Cover with Fish Line

LXX - XX X X X X - X X XXX

Style

- 08 – M8
- 12 – M12
- 16 – M16

Number of LED

- 01 – 1 LED
- 02 – 2 LED
- 04 – 4 LED
- 06 – 6 LED

Light Color Style

- R – Red
- B – Blue
- G – Green
- W – White
- A – Red / Green

LED Size

- A – Ø 3 mm
- B – Ø 5 mm

Electrical Type

- A – DC 4V
- B – DC 6V
- C – DC 12V
- D – DC 24V

Assembly Style

- M – Molding Type
- A – Assembly Type
- S – Solder Type
- P – 180° PCB Type
- R – 90° PCB Type
- B – Screw in Type

Waterproof Rating

- 6 – IP 66
- 7 – IP 67
- 8 – IP 68

Back Shell

- C – Circular (For Panel Type)
- R – Circular Rear (For Panel Type)
- F – Front Hexagonal (For Panel Type)
- H – Rear Hexagonal (For Panel Type)

Housing Material

- M – Metal
- P – Plastic

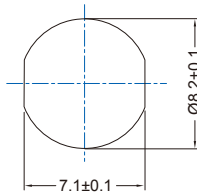
Version

- 000 : Phantom
- Without Cable
- 001 – Panel LED + Cable + Connector
- A05 – Harness (50mm)
- A10 – Harness (100mm)
- A15 – Harness (150mm)
- A20 – Harness (200mm)
- A25 – Harness (250mm)
- A30 – Harness (300mm)
-
- A-UL1061 Harness 26AWG

SPECIFICATIONS

No.	Specifications	Standard Value
01. Identifications	Plastic LED Metal LED	
02. Description	Panel Mount	
03. LED Size	Plastic LED: Ø3mm Metal LED: Ø3mm, Ø5mm	
04. Light Color	Red, Blue, Green, White, Yellow, Red / Green	
05. Mateial	Metal: Brass, Nickel Plated Plastic: PC + ABS	
06. Waterproof Rating	IP67	
07. Operating Temperature	-40°C to +80°C	
08. Breakdown Voltage	4V	

PANEL CUT-OUT



Panel (Chassis) Plastic		Panel (Chassis) Metal	
CONNECTOR	P/N	CONNECTOR	P/N
	LTWL08-01RAAS-PR7001 FEATURES: • Plastic Body • Red Light Color • Ø3 • IP 67		LTWL08-01R △ AS-MR7001 FEATURES: • Metal Body • Red • △ Available in Ø3 and Ø5 • IP 67
	LTWL08-01BAAS-PR7001 FEATURES: • Plastic Body • Blue Light Color • Ø3 • IP 67		LTWL08-01B △ AS-MR7001 FEATURES: • Metal Body • Blue Light Color • △ Available in Ø3 and Ø5 • IP 67
	LTWL08-01GAAS-PR7001 FEATURES: • Plastic Body • Green Light Color • Ø3 • IP 67		LTWL08-01G △ AS-MR7001 FEATURES: • Metal Body • Green Light Color • △ Available in Ø3 and Ø5 • IP 67
	LTWL08-01WAAS-PR7001 FEATURES: • Plastic Body • White Light Color • Ø3 • IP 67		LTWL08-01W △ AS-MR7001 FEATURES: • Metal Body • White Light Color • △ Available in Ø3 and Ø5 • IP 67
	LTWL08-01YAAS-PR7001 FEATURES: • Plastic Body • Yellow Light Color • Ø3 • IP 67		LTWL08-01Y △ AS-MR7001 FEATURES: • Metal Body • Yellow Light Color • △ Available in Ø3 and Ø5 • IP 67
	LTWL08-01YAAS-PR7001 FEATURES: • Plastic Body • Yellow Light Color • Ø3 • IP 67		LTWL08-01A △ AS-MR7001 FEATURES: • Metal Body • Red / Green Light Color • △ Available in Ø3 and Ø5 • IP 67

XXX - XX X X X X - X X X XXX

Number of Contacts

- 02, 03, Pin

Style

- A – For Cable with S/R
- B – For Cable without S/R
- P – For Panel Front Mounting
- R – For Panel Rear Mounting

Connector Style

- M – Male Connector
- F – Female Connector

Contact Type

- M - Male
- F - Female
- C - Combo

Specification

- PAA – $\frac{5}{8}$ " Size Current Rating 1A (Circular)
- PAB – $\frac{5}{8}$ " Size Current Rating 2A
- PAC – $\frac{5}{8}$ " Size Current Rating 3A
- PBA – $\frac{5}{8}$ " Size Current Rating 1A
- PBB – $\frac{5}{8}$ " Size Current Rating 2A
- PBC – $\frac{5}{8}$ " Size Current Rating 3A
- PCA – $\frac{5}{8}$ " Size Current Rating 1A
- PCB – $\frac{5}{8}$ " Size Current Rating 2A
- PCC – $\frac{5}{8}$ " Size Current Rating 3A
- PDA – A*B Size Current Rating 1A
- PDB – C*D Size Current Rating 2A
- PDC – E*F Size Current Rating 3A

Mating Style

- K – Lock (Short)
- L – Lock (Long)
- S – Screw
- Q – Quick

Waterproof Rating

- 6 = IP 66
- 7 = IP 67
- 8 = IP 68

Back Shell

- L – Straight (180° For Cable Type)
- R – Right Angle (90° For Cable Type)
- C – Circular (For Panel Type)
- S – Square (For Panel Type)

Version

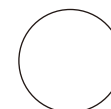
- 000 : Phantom
- Without Cable
- 001, 002,.....
- For Cable
- A01 - 1M ~ A99 - 99M
- A - UL2464 Cable

Assembly Style

- M – Molding Type
- A – Assembly Type
- S – Solder Type
- P – 180° PCB Type
- R – 90° PCB Type
- B – Screw in Type

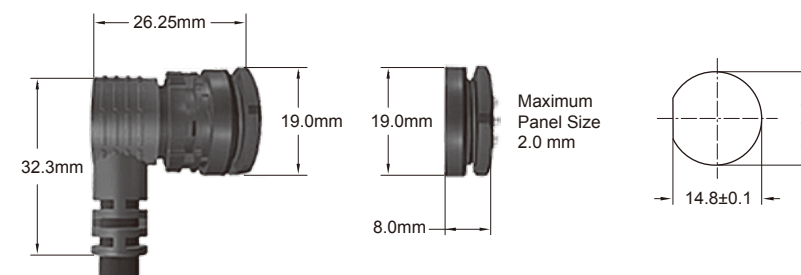
CONTACT PIN ARRANGEMENTS

1A



Female Connector Female Pin
Male Connector Male Pin

PANEL CUT-OUT



Panel (Chassis) Mount		Mating Parts of 1 & 2	
CONNECTOR	P/N	CONNECTOR	P/N
	1 LTWPAA-△RFFS-LC7001 FEATURES: • Female Connector • Lock Type, Sloder Contacts • Rear Mounting • Connector Rating 1A • IP 67 • △ Available in 8 or 10 Pins	 Short Nut	LTWPAA-△AMMM-K7AXX FEATURES: • Male Connector • In-line Molded Type • With SR • Cable Length 1~99 Meters • Cable Type UL2464 PVC Jacket • IP 67 • △ Available in 8 or 10 Pins
	2 LTWPAA-△RFFP-LC7001 FEATURES: • Female Connector • Lock Type, PCB Contacts • Rear Mounting • PCB 180° • IP 67 • △ Available in 8 or 10 Pins	 Long Nut	LTWPAA-△AMMM-LR7AXX FEATURES: • Male Connector, Lock Type • In-line Molded Type • With SR • Cable Length 1~99 Meters • Cable Type UL2464 PVC Jacket • IP 67 • △ Available in 8 or 10 Pins

XXX - XX X X X X - X X X XXX

Specification

- MID=Mini Din Connector

Numbe of Contacts

- 03 , 04, 05, 06, 07, 08 Pin

Style

- A – For Cable with S/R
- B – For Cable without S/R
- P – For Panel

Connector Style

- M – Male Connector
- F – Female Connector

Contact Type

- M – Male
- F – Female

Assembly Style

- M – Molding Type
- A – Assembly Type
- S – Solder Type
- P – PCB Type Unmated Waterproof (180°)
- R – PCB Type Unmated Waterproof (90°)

Waterproof Rating

- 5 = IP65
- 6 = IP 66
- 7 = IP 67
- 8 = IP 68

Back Shell

- L – Straight (180° For Cable Type)
- R – Right Angle (90° For Cable Type)
- C – Circular Straight (For Panel Type)

Mating Style

- L – Lock
- S – Screw
- Q – Quick

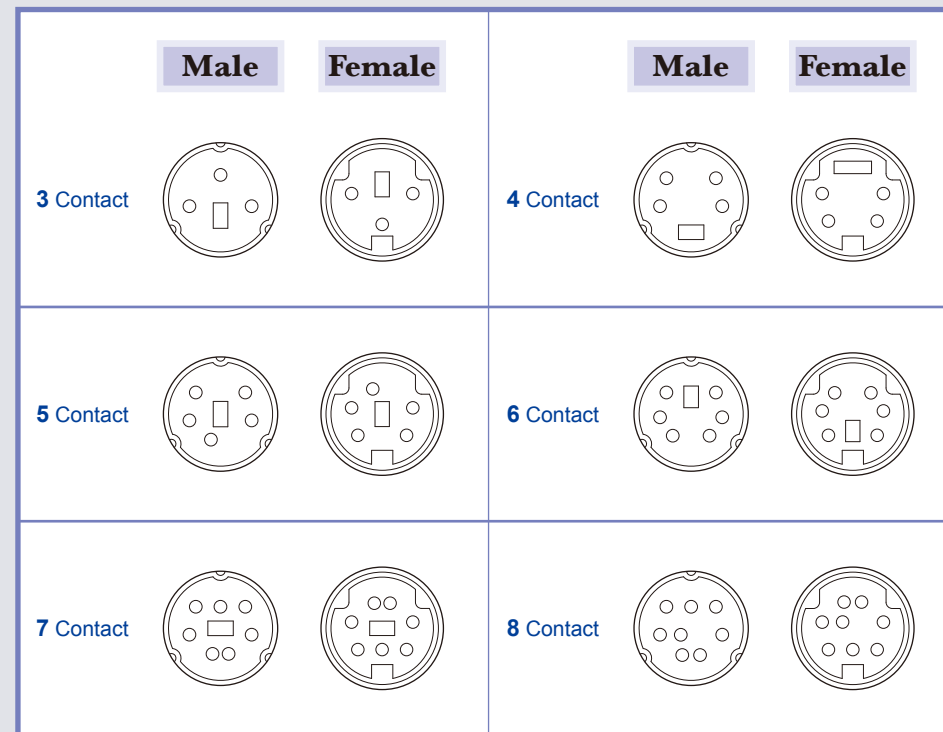
Version

- 000 : Phantom
- Without Cable 001, 002,.....
- For Cable A01 - 1M ~ A99 - 99M
- A – UL2464 26AWG

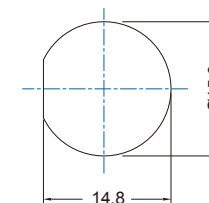
SPECIFICATIONS

No.	Specifications	Standard Value
01. Identifications		Mini Din
02. Description		Panel Mount, Molded with Cable
03. Current Rating / Pin Arrangements		1A : 3 to 8
04. Material		Contacts: Copper Alloy, Gold / TIN Plated Connector Body: PBT
05. Temperature Range		-20°C to + 80°C
06. Waterproof Rating		IP66, IP67
07. Contact Resistance		≤20mΩ Max
08. Insulation Resistance		≥50mΩ at DC 250V
09. Breakdown Voltage		≥AC 250V / 1 Minute
10. Standard Cable Length (for Molded Cable)		1-99M (Standard Cable: UL2464 PVC Jacket)

CONTACT PIN ARRANGEMENT



PANEL CUT-OUT



69 Mini DIN Connector (Male)

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWMID-△PMFS-SC7001 FEATURES: • Screw Type • IP 67 • △1A: 3 to 8 Pins		LTWMID-△AFMM-SL△AXX FEATURES: • In-Line Molded Type • With SR • Screw Type • △1A: 3 to 8 Pins • △IP 67	
	LTWMID-△AMFM-△L△AXX FEATURES: • In-Line Molded Type • With SR • △1A: 3 to 8 Pins • △Screw or Quick Type • △IP 66 (Quick) or IP67 (Screw)			

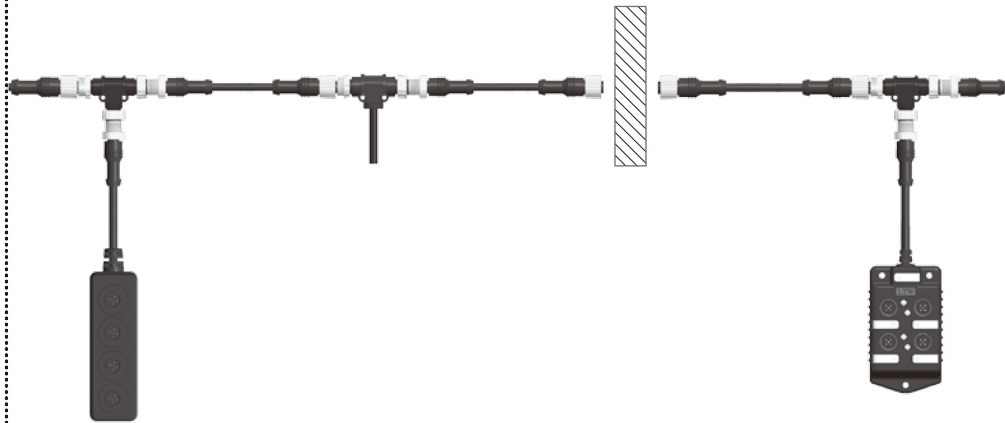
NMEA 2000 Product Certificate 70



• NMEA 2000 Mini Cable and Connector •



• NMEA 2000 Micro Cable and Connector •



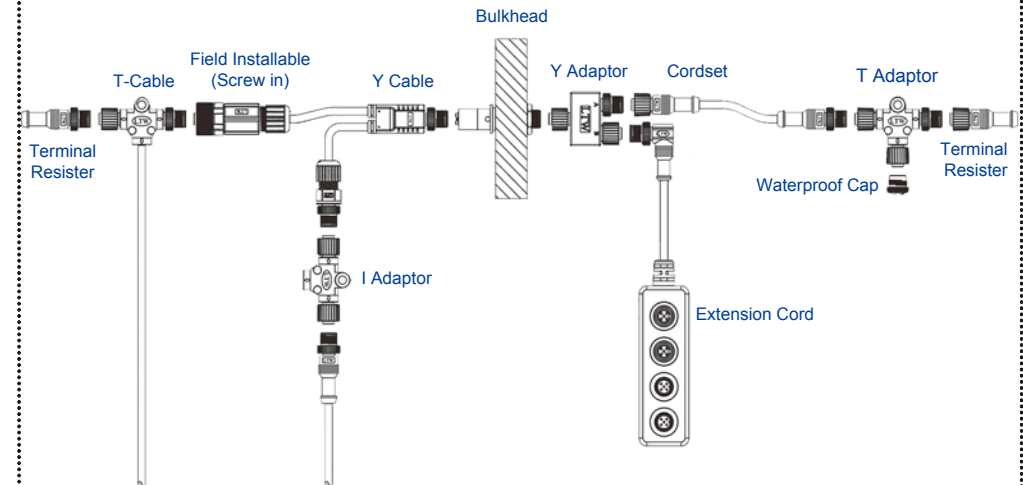
Features: Marine Network Cable

- Provides easy installation for fast and reliable connection
- Ensures high performance and signaling
- Designed for the marine environment
- Various options of connector type is available to support all system requirements

About NMEA 2000

Amphenol LTW Technology expands its coverage targeting the marine industry that features the NMEA 2000 standard.

The NMEA 2000 standard contains the requirements of a serial data communications network to inter-connect marine electronic equipment on vessels. It is multi-master and self-configuring, and there is no central network controller. Equipment designed to this standard will have the ability to share data, including commands and status with other compatible equipment over a single channel.



From the finest products supporting numerous connector applications worldwide, Amphenol LTW introduces the advanced and most comprehensive connector and cabling solution for the Marine Industry.

We made it possible to simplify your system needs and promote convenience with a cost-effective offer and wide array of waterproof connector choices featuring Amphenol LTW Marine Network Cable Guide.

This guide contains the requirements of a serial data communications network to inter-connect marine electronic equipment on vessels. Equipment designed to this system will have the ability to share data, including commands and status with other compatible equipment over a single channel. It also introduces Micro series connector and accessories available in plastic and metal version specially designed to fit marine requirements.

All of these products are made with quality, enhanced performance and highly reliable. Discover this and more as we introduce you Amphenol LTW Marine Network Cable Guide.

XXX - XX X X X X - X X X XXX

Number of Contacts

- 02, 03, Pin

Style

- A – For Cable with S/R
- B – For Cable without S/R
- P – For Panel

Specification

- MN – Mini Size Current Rating 8A (NMEA Non Approval)
- MC – Micro Size Current Rating 4A (NMEA Non Approval)
- MNP – Mini Plastic Size Current Rating 8A (NMEA Non Approval)
- MCP – Micro Plastic Size Current Rating 4A (NMEA Non Approval)
- MNL – Mini Size LED Current Rating 8A (NMEA Non Approval)
- UMN – Mini Size Current Rating 8A (NMEA 30u"Approval Product)
- UMC – Micro Size Current Rating 4A (NMEA 30u"Approval Product)
- UMCP – Micro Plastic Size Current Rating 4A (NMEA 30u"Approval Product)

Connector Style

- M – Male Connector
- F – Female Connector

Contact Type

- M – Male
- F – Female

Assemble Style

- M – Molding Type
- A – Assembly Type (Solder)
- B – Assembly Type (Screw type)
- P – For Panel
- T – Termination Resistor

Back Shell

- L – Straight (180° For Cable Type)
- R – Right Angle (90° For Cable Type)
- C – Circular (For Panel Type)
- F – Front Hexagonal (For Panel Type)

Waterproof Rating

- 5 = IP 65 • 6 = IP 66
- 7 = IP 67 • 8 = IP 68

Mating Style

- L – Lock
- S – Screw
- Q – Quick

Version

- 000 : Phantom without Cable
- Without Cable 001, 002,
- For Cable A01 - 1M ~ A99 - 99M

NMEA Non Approval

- A – Cable 22+24+B PVC for NMEA Micro
- B – Cable 18+22+B PVC for NMEA Micro
- C – Cable 16+18+B PVC for NMEA Mini
- D – Cable 16AWG 4C PVC for NMEA Mini

NMEA Approval

- A – Device Net Cable 22+24+B PVC for NMEA Micro Approval Product
- C – Device Net Cable 15+18+B PVC for NMEA Mini Approval Product

XX - XX XX XX - XXX - X X XXX

Specification

- AA – Mini Size Adaptor
- BA – Standard Size Adaptor
- RJ – RJ Unshield Connector Adaptor
- RS – RJ Shielded Connector Adaptor
- UB – USB Connector Adaptor
- 13 – 1394 Connector Adaptor
- TN – TNC Connector Adaptor
- SM – M8 Sensor Connector Adaptor
- SS – M12 Sensor Connector Adaptor
- PS – Plastic M12 Sensor Connector Adaptor
- SB – M12 Sensor B-Coded Connector Adaptor
- PB – Plastic M12 Sensor D-Coded Connector Adaptor
- SD – M12 Sensor B-Coded Connector Adaptor
- PD – Plastic M12 Sensor D-Coded Connector Adaptor
- SI – M12 Sensor I-Style Connector Adaptor
- PI – Plastic M12 Sensor I-Style Connector Adaptor
- MN – Mini Adaptor (NMEA Non Approval)
- MC – Micro Adaptor (NMEA Non Approval)
- NC – Mini- Micro Adaptor (NMEA Non Approval)
- PN – Plastic Mini Adaptor (NMEA Non Approval)
- PC – Plastic Micro Adaptor (NMEA Non Approval)
- PO – Plastic Mini - Micro Adaptor (NMEA Non Approval)
- SL – Solar Adaptor
- GA – I Adaptor
- UMN – Mini Adaptor (NMEA 30u"Approval Product)
- UMC – Micro Adaptor (NMEA 30u"Approval Product)
- UNC – Mini - Micro Adaptor (NMEA 30u"Approval Product)
- UPC – Plastic Micro Adaptor (NMEA 30u"Approval Product)

Mating Style

- L – Lock
- S – Screw
- C – Combo
- Q – Quick

Style

- I – I adaptor
- T – T adaptor
- Y – Y adaptor
- C – Double-Connector with Cable
- B – BulkHead
- E – Elbow

Version

- Without Cable 001, 002,
- For Cable A01 - 1M ~ A99 - 99M

NMEA Non Approval

- A – Cable 22+24+B PVC For NMEA Micro
- B – Cable 18+22+B PVC For NMEA Micro
- C – Cable 16+18+B PVC For NMEA Mini

NMEA Approval

- A – Device Net cable 22+24+B PVC for NMEA Micro Approval Product
- C – Device Net cable 15+18+B PVC for NMEA Mini Approval Product

No. of Contacts for End 1, 2, 3

- 00, 00, 00 - RJ, USB, TNC, 1394, Solar
- 00, XX, XX - I Adaptor (Circular and Sensor Connector Only)
- XX, XX, XX - T, Y Adaptor (Circular and Sensor Connector Only)
- XX=
 - 02 ~ 03 – for Mini Size (5A)
 - 04 ~ 06 – for Mini Size (2A)
 - 02 ~ 08 – for Standard Size (5A)
 - 10 ~ 12 – for Standard Size (2A)
 - 02 ~ 04 – for Standard Size (10A)
 - 03 ~ 05 – for Sensor Connector A, B, D-Coded (5A)
 - 06 ~ 08 – for Sensor Connector A, B, D-Coded (2A)
 - 04 ~ 05 – for Sensor Connector I-Style
 - 05 – for NMEA Connector

Connector + Pin Gender for End 1,2,3

- 0, X, X – I Adaptor
- X, X, X – T, Y Adaptor
- X=
 - M – Male + Male
 - F – Female + Female
 - H – Male + Female
 - B – Female + Male
- RJ=
 - MM – Plug
 - FF – Jack

X - XXXXXX - XXXXXX - X XXX**Specification**

- A – Mini Size Adaptor
- B – Standard Size Adaptor
- S – M12 Sensor Adaptor
- M – M8 Sensor Adaptor
- N – NMEA2000 Mini-C Adaptor (NMEA Non Approval)
- E – NMEA2000 Micro-C Adaptor (NMEA 30u"Approval Product)
- U – NMEA2000 Mini-C Adaptor (NMEA 30u"Approval Product)

Mating Style

- L – Lock
- S – Screw

Version

- 000 : Phantom Without Cable
- Without Cable
001, 002,
- For Cable
A01 – 1M ~ A99 – 99M

NMEA Non Approval

- A – Cable 22+24+B PVC for NMEA Micro
- B – Cable 18+22+B PVC for NMEA Micro
- C – Cable 16+18+B PVC for NMEA Mini

NMEA Approval

- A – Device Net cable 22+24+B PVC for NMEA Micro Approval Product
- C – Device Net cable 15+18+B PVC for NMEA Mini Approval Product

No. of Contacts for Connector 1, 2, 3, 4, 5, 6

1, 2, 3, 4, 0–All Conn.

5, 6–Mini Size, Sensor M12, M8 Connector

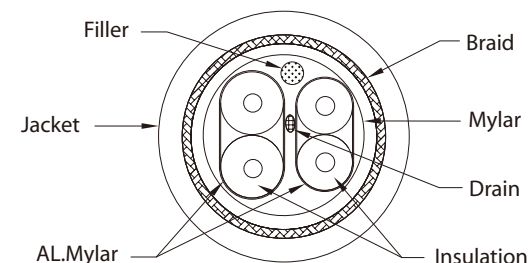
- 2~3 – for Mini Size (5A)
- 4~6 – for Mini Size (2A)
- 2~8 – for Standard Size (5A)
- 2~4 – for Standard Size (10A)
- 3~5 – for Sensor Conn. A, B, D-Coded (5A)
- 6~8 – for Sensor Conn. A, B, D-Coded (2A)
- 4~5 – for Sensor Conn. I-Style
- XXXXXX - Connector 1, 2, 3, 4, 5 and 6

Connector + Contacts Gender

1, 2, 3, 4, 0, 0–All Conn.

1, 2, 3, 4, 5, 6–Connector

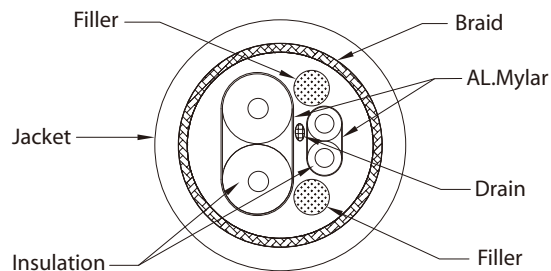
- M – Male + Male
- F – Female + Female
- H – Male + Female
- B – Female + Male

SPECIFICATIONS**(24#+1P+AL) + (22+1P+AL) + Drain + AL.Mylar + Braid**

No.	Specifications	Standard Value
01. Rating Temperature		75°C
02. Voltage		600V
03. Operating Temperature		-20°C to +75°C
04. Conductor		AWG: 22 AWG, 24 AWG OD(Ref): 0.80mm, 0.64mm
05. Insulation Material		PVC: OD 1.8 ± 0.1mm FPE: OD 1.9 ± 0.1mm
06. Drain		22AWG
07. Jacket		Material: PVC Color: Gray OD: Ø7.1 ± 0.2mm
08. Color Code:		Insulation 24WAG: Blue, White Insulation 22WAG: Red, Black
09. Certificated		UL E34972

SPECIFICATIONS

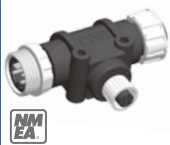
(18#+1P+AL) + (22+1P+AL) + Drain + AL.Mylar + Braid



No.	Specifications	Standard Value
01. Rating Temperature		75°C
02. Voltage		600V
03. Operating Temperature		-20°C to +75°C
04. Conductor		AWG: 18 AWG, 15 AWG OD(Ref): 1.27mm, 1.60mm
05. Insulation Material		PVC: OD 3.8 ± 0.1mm FPE: OD 2.7 ± 0.1mm
06. Drain		18AWG
07. Jacket		Material: PVC Color: Gray OD: Ø12.2 ± 0.2mm
08. Color Code:		Insulation 24WAG: Blue, White Insulation 22WAG: Red, Black
09. Certicated		UL E34972

Cable Assembly		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
			LTWUMC-000505-0MF-CSAXX FEATURES: • Double Connector with Cable • Screw Type • IP 68	
			LTWUMC-050505-FMF-TS001 FEATURES: • T Adaptor • Screw Type • IP 68	
			LTWUMC-05BFFB-SL7001 FEATURES: • Molded with Cable • Screw Type • IP 67	
			LTWUMC-000505-0FM-BS001 FEATURES: • Bulkhead • Screw Type • IP 67	
			LTWE-555500-FFFM00-S001 FEATURES: • T Adaptor (2 Way Tee) • Screw Type • IP 68	
			LTWE-555555-FFFFFM-S001 FEATURES: • T Adaptor(4 Way Tee) • Screw Type • IP 68	
			WE-555500-FFFF00-SAXX FEATURES: • Extension Cord • Screw Type • IP 68	

79 Metal Version: Mini Cable Assembly

Cable Assembly		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWUMN-05AMMM-SL8CXX FEATURES: • Molded with Cable • Screw Type • IP 68		LTWUMN-000505-0MF-CSCXX FEATURES: • Double Connector with Cable • Screw Type • IP 68	
			LTWUMN-050505-FMF-TS001 FEATURES: • T Adaptor • Screw Type • IP 67	
			LTWUNC-050505-FMF-TS001 FEATURES: • T Adaptor • Screw Type • IP 67	
			LTWUMN-000505-0FM-BS001 FEATURES: • Bulkhead • Screw Type • IP 67	
			LTWUMN-05BFFB-SL7001 FEATURES: • Molded with Cable • Screw Type • IP 67	
			LTWU-455000-MFF000-S001 FEATURES: • PowerTap Box • Screw Type • IP 68	

Metal Version: Micro Double Ended Cordset 80

Cable Assembly		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWUMC-000505-0MF-CSAXX FEATURES: • Double Connector with Cable • Screw Type • IP 68		LTWUMC-05BMMM-SL8AXX FEATURES: • Molded with Cable • Screw Type • IP 68	
			LTWUMC-000505-0MF-CSAXX FEATURES: • Double Connector with Cable • Screw Type • IP 68	
			LTWUMC-050505-FMF-TS001 FEATURES: • T Adaptor • Screw Type • IP 68	
			LTWUMC-05BFFB-SL7001 FEATURES: • Molded with Cable • Screw Type • IP 67	
			LTWUMC-05BMMM-SL7001 FEATURES: • Molded with Cable • Screw Type • IP 67	
			LTWUMC-000505-0FM-BS001 FEATURES: • Bulkhead • Screw Type • IP 67	
			LTWE-555500-FFFM00-S001 FEATURES: • T Adaptor (2 Way Tee) • Screw Type • IP 68	

Cable Assembly		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWUMC-000505-0MF-CSAXX FEATURES: • Double Connector with Cable • Screw Type • IP 68		LTWE-555555-FFFFFM-S001 FEATURES: • T Adaptor (4 Way Tee) • Screw Type • IP 68	
			LTWE-555500-FFFF00-SAXX FEATURES: • Extension Cord • Screw Type • IP 68	
			LTWUMC-05BFFT-SL8001 FEATURES: • Termination Resister • Screw Type • IP 68	
			LTWUMC-05BMMT-SL8001 FEATURES: • Termination Resister • Screw Type • IP 68	
	LTWUMN-000505-0MF-CSCXX FEATURES: • Double Connector with Cable • Screw Type • IP 68		LTWUMN-05AMMM-SL8CXX FEATURES: • Molded with Cable • Screw Type • IP 68	
			LTWUMN-000505-0MF-CSCXX FEATURES: • Double Connector with Cable • Screw Type • IP 68	
			LTWUMN-050505-FMF-TS001 FEATURES: • T Adaptor • Screw Type • IP 67	

Cable Assembly		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWUMN-000505-0MF-CSCXX FEATURES: • Double Connector with Cable • Screw Type • IP 68		LTWUNC-050505-FMF-TS001 FEATURES: • T Adaptor • Screw Type • IP 67	
			LTWUMN-000505-0FM-BS001 FEATURES: • Bulkhead • Screw Type • IP 67	
			LTWUMN-05BMMB-SL7001 FEATURES: • Molded with Cable • Screw Type • IP 67	
			LTWUMN-05BFFB-SL7001 FEATURES: • Molded with Cable • Screw Type • IP 67	
			LTWU-455000-MFF000-S001 FEATURES: • PowerTap Box • Screw Type • IP 68	
			LTWUMN-05AFFT-SL8001 FEATURES: • Termination Resister • Screw Type • IP 68	
			LTWUMN-05AMMT-SL8001 FEATURES: • Termination Resister • Screw Type • IP 68	

T Cable Assembly		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWUMC-050500-FM0-TSAXX FEATURES: • T Adaptor, T Cable • Screw Type • IP 68		LTWE-555500-FFFF00-SAXX FEATURES: • Extension Cord • Screw Type • IP 68	
			LTWUMC-05BFFT-SL8001 FEATURES: • Termination Resister • Screw Type • IP 68	
			LTWUMC-05BMMT-SL8001 FEATURES: • Termination Resister • Screw Type • IP 68	

Bulkhead		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWUMC-000505-0FM-BS001 FEATURES: • Bulkhead • Screw Type • IP 67		LTWUMC-05BMMM-SL8AXX FEATURES: • Molded with Cable • Screw Type • IP 68	
			LTWUMC-000505-0MF-CSAXX FEATURES: • Double Connector with Cable • Screw Type • IP 68	
			LTWUMC-05BFFB-SL7001 FEATURES: • Molded with Cable • Screw Type • IP 67	
			LTWUMC-05BMMB-SL7001 FEATURES: • Molded with Cable • Screw Type • IP 67	
	LTWUMN-000505-0FM-BS001 FEATURES: • Bulkhead • Screw Type • IP 67		LTWUMN-05AMMM-SL8CXX FEATURES: • Molded with Cable • Screw Type • IP 68	
			LTWUMN-000505-0MF-CSCXX FEATURES: • Double Connector with Cable • Screw Type • IP 68	
			LTWUMN-05BMMB-SL7001 FEATURES: • Molded with Cable • Screw Type • IP 67	
			LTWUMN-05BFFB-SL7001 FEATURES: • Molded with Cable • Screw Type • IP 67	

XXX - XX X X X X - X X X XXX

Number of Contacts

Phone Jack

- 01 – Ø2.5
- 02 – Ø3.5

DC Power Jack

- 11 – Ø2.35 × Ø0.7
- 12 – Ø3.0 × Ø1.1
- 13 – Ø1.0
- 14 – Ø3.5

Style

- A – For Cable with S/R
- B – For Cable without S/R
- P – For Panel Front Mounting
- R – For Panel Rear Mounting

Connector Style

- M – Male Connector
- F – Female Connector

Contact Type

- M – Male
- F – Female

Specification

- DCS – Stereo Phone Jack Connector
- DCP – DC Power Jack Connector

Waterproof Rating

- 6 = IP 66
- 7 = IP 67

Version

- 000 : Phantom
- Without Cable
- 001, 002,.....
- For Cable
- A01 - 1M ~ A99 - 99M
- A - UL2464 Cable

Back Shell

- L – Straight
(180° For Cable Type)
- R – Right Angle
(90° For Cable Type)
- C – Circular
(For Panel Type)

Mating Style

- Q – Quick

Assembly Style

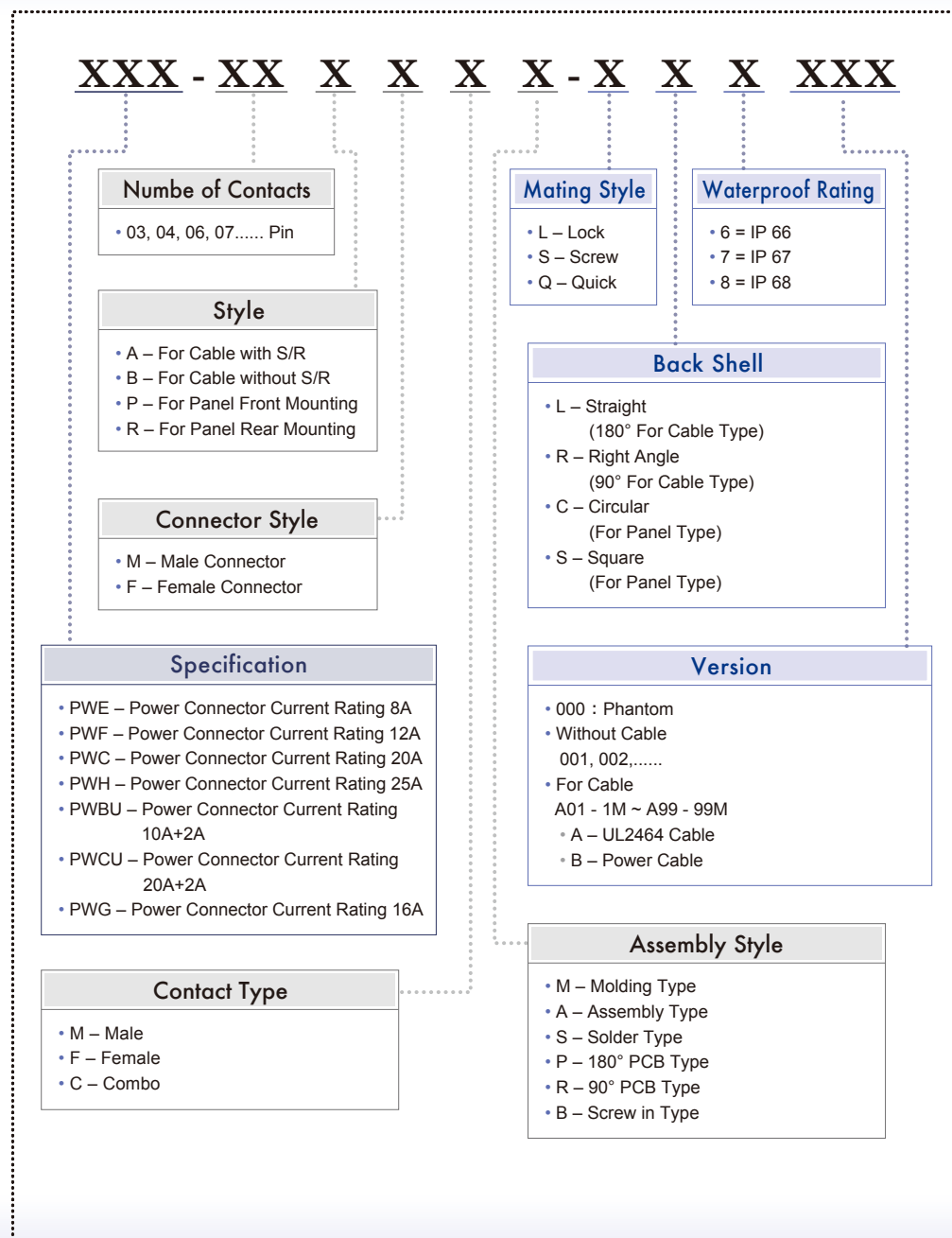
- M – Molding Type
- A – Assembly Type
- S – Solder Type
- P – PCB Type (180°)
- R – PCB Type (90°)

SPECIFICATIONS

No.	Specifications	Standard Value
01. Identifications		DCP: Power Jack DCM: Mono Phone Jack DCS: Stereo Phone Jack
02. Description		Panel Mount, Molded with Cable
03. Plug Dimension		Power Jack: Ø3.5mm Phone Jack: Ø3.5mm, Ø2.5mm
04. Waterproof Rating		IP66
05. Standard Cable Length (for Molded Cable)		1–99M (Standard Cable: UL2464 PVC Jacket)

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWDCP-14RMFP-QC6001 FEATURES: • DC Power Jack Connector • Ø 3.5mm • Male Connector • Panel Rear Mounting • IP 66		LTWDCP-14AFMM-QL6A  FEATURES: • DC Power Plug Connector • Ø 3.5mm • Female Connector • In-line Molded Type • With SR • IP 66 •  Cable length, 1 to 99 Meters	

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWDCM-01RMFS-QC6001 LTWDCM-02RMFS-QC6001 FEATURES: • DC Mono Phone Jack Connector • Ø 2.5mm or Ø 3.5mm • Male Connector • Rear Mounting • IP 66		LTWDCM-01AFMM-QL6A LTWDCM-02AFMM-QL6A FEATURES: • DC Mono Jack Connector • Ø 2.5mm or Ø 3.5mm • Female Connector • In-line Molded Type • With SR • IP 66	
	LTWDCS-01RMFS-QC6001 LTWDCS-02RMFS-QC6001 FEATURES: • DC Stereo Phone Jack Connector • Ø 2.5mm or Ø 3.5mm • Male Connector • Rear Mounting • IP 66			
	LTWDCM-01AMFM-QL6A LTWDCM-02AMFM-QL6A FEATURES: • DC Mono Phone Jack Connector • Ø 2.5mm or Ø 3.5mm • Male Connector • In-line Molded Type • With SR • IP 66		LTWDCS-01AFMM-QL6A LTWDCS-02AFMM-QL6A FEATURES: • DC Stereo Jack Connector • Ø 2.5mm or Ø 3.5mm • Female Connector • In-line Molded Type • With SR • IP 66	
	LTWDCS-01AMFM-QL6A LTWDCS-02AMFM-QL6A FEATURES: • DC Stereo or Mono Phone Jack Connector • Ø 2.5mm or Ø 3.5mm • Male Connector • In-line Molded Type • With SR • IP 66			

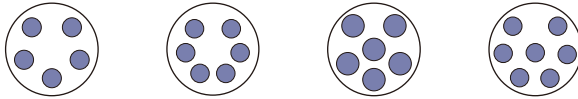
**SPECIFICATIONS**

No.	Specifications	Standard Value
01. Identifications		Power Connector
02. Description		Panel Mount, Molded with Cable and Field Installable
03. Current Rating / Pin Arrangements		8A : 5 to 7 12A : 2 to 4 16A : 3+PE (Screw in Type Termination) 20A : 3
04. Material		Contacts: Copper Alloy, Gold Plated 16A Available in Gold, Silver and Tin Plating Connector Body: Nylon + GF UL Recognized
05. Temperature Range		Cable: -20°C to +80°C Connector Body: -40°C to +105°C
06. Waterproof Rating		IP67
07. Contact Resistance		5mΩ
08. Insulation Resistance		≥100MΩ at DC 250V
09. Durability		500 Times
10. Breakdown Voltage		≥AC 1000V / 1 Minute
11. Standard Cable Length (for Molded Cable)		1–99M (Standard Cable: UL2464 PVC Jacket or Power Cable)
12. Field Installable		All Solder Contacts Unless And Otherwise Indicated

CONTACT PIN ARRANGEMENT

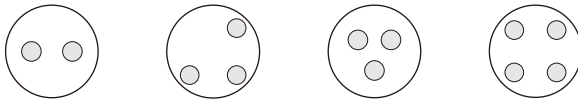
8A Current

Size is between C and D size



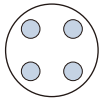
12A Current

Size is between C and D size



16A Current

Size is between C and D size



20A Current

C size



20A+2A Current

Size is over E size



25A Current

C size



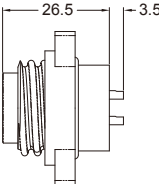
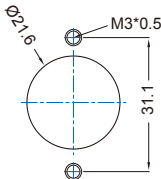
○ 2A ● 8A ● 12A ● 16A ○ 20A ○ 25A

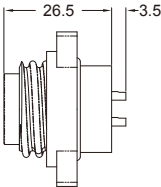
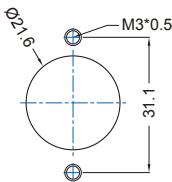


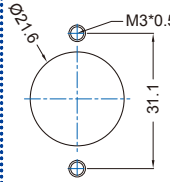
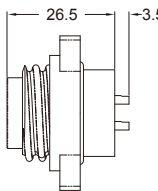
Female Connector Female Pin
Male Connector Male Pin

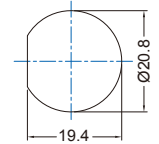
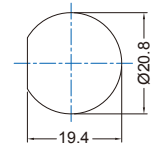


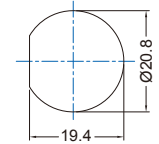
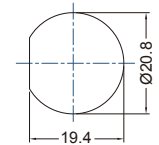
Female Connector Male Pin
Male Connector Female Pin

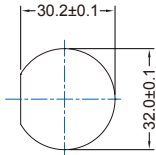
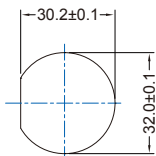
Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWPWE-PMMS-SC7001 FEATURES: - Male Connector - Front Mounting - IP 67 - Solder Contacts 8A: 5 to 7 Pins - UL Approved		LTWPWE-AFFM-SL7AX FEATURES: - Female Connector - In-line Molded Type (Cable to Cable or Cable to Field Installable) - With SR - IP 67 8A: 5 to 7 Pins	
PANEL CUT-OUT 			LTWPWE-BFFA-SL7001 FEATURES: - Female Connector - Solder Contacts - In-line Field Installable (Field Installable to Field Installable or Cable to Field Installable) - Without SR - IP 67 8A: 5 to 7 Pins - UL Approved	
	LTWPWE-PFFS-SC7001 FEATURES: - Female Connector - Front Mounting - IP 67 - Solder Contacts 8A: 5 to 7 Pins - UL Approved		LTWPWE-AMMM-SL7AX FEATURES: - Male Connector - In-line Molded Type (Cable to Cable or Cable to Field Installable) - With SR - IP 67 8A: 5 to 7 Pins	
PANEL CUT-OUT 			LTWPWE-BMMA-SL7001 FEATURES: - Male Connector - Solder Contacts - In-line Field Installable (Field Installable to Field Installable or Cable to Field Installable) - Without Cable - IP 67 8A: 5 to 7 Pins - UL Approved	

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	LTWPF-PMMS-SC7001 FEATURES: - Male Connector - Front Mounting - IP 67 - Solder Contacts 12A: 2 to 4 Pins - UL Approved	 LTWPF-AFFM-SL7AX FEATURES: - Female Connector - In-line Molded Type (Cable to Cable or Cable to Field Installable) - With SR - IP 67 12A: 2 to 4 Pins		 LTWPF-BFFA-SL7001 FEATURES: - Female Connector - Solder Contacts - In-line Field Installable (Field Installable to Field Installable or Cable to Field Installable) - Without SR - IP 67 12A: 2 to 4 Pins
 PANEL CUT-OUT 	LTWPF-PFFS-SC7001 FEATURES: - Female Connector - Front Mounting - IP 67 - Solder Contacts 12A: 2 to 4 Pins - UL Approved	 LTWPF-AMMM-SL7AX FEATURES: - Male Connector - In-line Molded Type (Cable to Cable or Cable to Field Installable) - With SR - IP 67 12A: 2 to 4 Pins		
		 LTWPF-BMMA-SL7001 FEATURES: - Male Connector - Solder Contacts - In-line Field Installable (Field Installable to Field Installable or Cable to Field Installable) - Without Cable - IP 67 12A: 2 to 4 Pins		

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	LTWPG-04PFFB-SC FEATURES: - Male Connector, Screw Type Lock - Panel Type, Nylon + GF Material - IP 67 - Male Pins 16A (3+PE)	 LTWPG-04BMMB-SL FEATURES: - Male Connector, Screw Type Lock - Straight Assembly Type, Nylon + GF Material - IP 67 - Male Pins 16A (3+PE)		 LTWPG-04BMMB-SR FEATURES: - Male Connector, Screw Type Lock - Right Angle Assembly Type, Nylon + GF Material - IP 67 - Male Pins 16A (3+PE)
 PANEL CUT-OUT 	LTWPG-04PMMB-SC FEATURES: - Female Connector, Screw Type Lock - Panel Type, Nylon + GF Material - IP 67 - Female Pins 16A (3+PE)	 LTWPG-04BMMB-SL FEATURES: - Female Connector, Screw Type Lock - Straight Assembly Type, Nylon + GF Material - IP 67 - Female Pins 16A (3+PE)		
		 LTWPG-04BMMB-SR FEATURES: - Female Connector, Screw Type Lock - Right Angle Assembly Type, Nylon + GF Material - IP 67 - Female Pins 16A (3+PE)		

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	LTWPMC-03RMMS-LC7001 LTWPMC-03RMMS-LC7002 FEATURES: • Panel Male Connector, Lock Type • Rear Mounting • IP 67 • 20A (2+PE) • Solder Type, Male Contacts • UL and TUV Approved: LTWPMC-03RMMS-LC7002	 LTWPMC-03AFFM-LL7AXX FEATURES: • Female Connector • In-line Molded Type • With SR • 20A (2+PE) Female Contacts • IP 67		
		 LTWPMC-03BFFA-LL7001 FEATURES: • Female Connector • Field Installable • 20A (2+PE) Female Contacts • IP 67		
 PANEL CUT-OUT 	LTWPMC-03RMFS-LC7001 LTWPMC-03RMFS-LC7002 FEATURES: • Panel Male Connector, Lock Type • Rear Mounting • IP 67 • 20A (2+PE) • Solder Type, Female Contacts • UL and TUV Approved: LTWPMC-03RMFS-LC7002	 LTWPMC-03AFMM-LL7AXX FEATURES: • Female Connector • In-line Molded Type • With SR • 20A (2+PE) Male Contacts • IP 67		
		 LTWPMC-03BFMA-LL7001 FEATURES: • Female Connector • Field Installable • 20A (2+PE) Male Contacts • IP 67		

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	LTWPWCU-04RMMS-LC7001 LTWPWCU-04RMMS-LC7002 FEATURES: • Panel Male Connector, Lock Type • Rear Mounting • IP 67 • 20A*3+2A Male Contacts • Solder Type • UL and TUV Approved: LTWPWU-03RMMS-LC7002	 LTWPWCU-04AFFM-LL7AXX FEATURES: • Female Connector • In-line Molded Type • With SR • 20A*3+2A Female Contacts • IP 67		
 PANEL CUT-OUT 	LTWPWCU-04RMFS-LC7001 LTWPWCU-04RMFS-LC7002 FEATURES: • Panel Male Connector, Lock Type • Rear Mounting • IP 67 • 20A*3+2A Female Contacts • Solder Type • UL and TUV Approved: LTWPWU-03RMFS-LC7002	 LTWPWCU-04AFMM-LL7AXX FEATURES: • Female Connector • Male Contact • In-line Molded Type • With SR • 20A*3+2A Male Contacts • IP 67		

Male Connector		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	LTWPTH-03PMMB-SC7001 FEATURES: • Panel Male Connector • Screw Type • Front Mounting • 25A (2+PE) • IP 67 • Screw in Type Male Contacts			
 PANEL CUT-OUT 	LTWPTH-03AMMM-SL7AXX FEATURES: • Screw Type with SR • Molded with Cable • 25A (2+PE) Male Pins • IP 67	 LTWPTH-03AFFM-SL7AXX FEATURES: • Female Connector • Screw Type with SR • Molded with Cable • 25A (2+PE) Female Pins • IP 67		

XXX - XX X XX X - X X X XXX

Cat

- 00
- 05 – Cat.5
- 5E – Cat.5e
- 06 – Cat.6

Mating Style

- L – Lock
- S – Screw
- Q – Quick

Waterproof Rating

- 6 = IP 66
- 7 = IP 67
- 8 = IP 68

Style

- A – For Cable with S/R
- B – For Cable without S/R
- P – For Panel Front Mounting
- R – For Panel Rear Mounting

Connector Style

- MM – Plug Connector
- FF – Jack Connector

Back Shell

- L – Straight (180° For Cable Type)
- R – Right Angle (90° For Cable Type)
- C – Circular (For Panel Type)
- S – Square (For Panel Type)

Assembly Style

- M – Molding Type
- A – Assembly Type
- S – Solder Type
- P – 180° PCB Type
- R – 90° PCB Type
- D – 110D
- I – IDC
- J – Jack
- T – Terminal Type

Specification

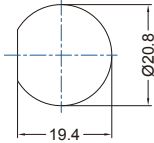
- RJ – RJ45 Connector
- RJS – RJ45 Shield Connector Plastics Nut
- RJM – RJ45 Shield Connector Metal Nut
- RJ0 – RJ 10PXC Connector (13/16"-16UN)
- RS0 – RJ 10PXC Shield Connector Plastics Nut (13/16"-16UN)
- RM0 – RJ 10PXC Shield Connector Metal Nut (13/16"-28UN)
- RJ8 – RJ 8PXC Connector (13/16"-16UN)
- RS8 – RJ 8PXC Shield Connector (13/16"-16UN)
- RJ6 – RJ 6PXC Connector (13/16"-16UN)
- RS6 – RJ 6PXC Shield Connector (13/16"-16UN)
- RM6 – RJ 6PXC Shield Connector Metal Nut (13/16"-28UN)
- RJ4 – RJ 4PXC Connector (13/16"-16UN)
- RS4 – RJ 4PXC Shield Connector (13/16"-16UN)
- RM4 – RJ 4PXC Shield Connector Metal Nut (13/16"-28UN)

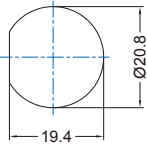
Version

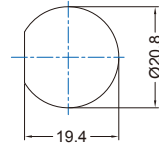
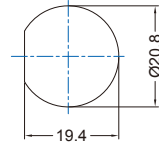
- 000 : Phantom
- Without Cable
001, 002,.....
- For Cable
A01 - 1M ~ A99 - 99M
- A – C5 UTP Cable
- B – C5 FTP Cable
- D – C5E UTP Cable
- E – C5E FTP Cable

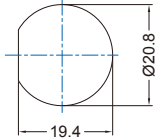
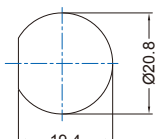
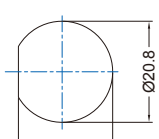
SPECIFICATIONS

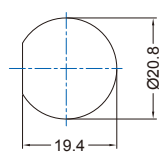
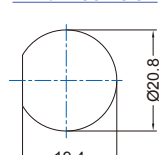
No.	Specifications	Standard Value
01. Identifications		RJ Jack and plug
02. Description		Panel Mount, Molded with Cable and Field Installable
03. Data		100 Base, 100 Base T and 1000 Base T Networks Cat 5E per TIA or EIA 568B Class D per ISO / IEC 11801
04. Category		Cat. 5 Cat. 5E Cat. 6
05. Material		Contacts: Copper Alloy with Gold Plated Connector Body: PBT(Jack), Polycarbonate(Plug)
06. Temperature Range		-20°C to +80 C -40°C to +85°C
07. Waterproof Rating		IP67, IP68
08. Durability		750 Cycles
09. Flame Test		UL / CSA FT4 Flame Test
10. Thermal shock		5 Cycles at -20°C to +80°C and -40°C to +85°C
11. Salt Spray		48 hrs
12. Standard Cable Length (for Molded Cable)		1-99M (Standard Cable: UTP or FTP)

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	LTWRM0-5EPFFJ-SC7 △ FEATURES: • 10P10C • Screw Type • IP 67 • △ Means Different Versions		LTWRM0-5EBMMM-SL7EXX FEATURES: • Screw Type • Molded with Cable • IP 67 • 10P10C • Cable FTP	
			LTWRJM-00BMMA-SL7003 FEATURES: • Screw Type • Field Installable • Metal • IP 67	

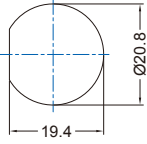
Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	LTWRJM-5EPFFJ-SC7 - Shielded RJ45 - Cat.5E - RJ45 Jack - Screw Type - IP 67 - Means Different Versions		LTWRJM-5EBMMM-SL7EXX - Screw Type - Molded with Cable - IP 67 - RJ45 - Cat.5E - Cable FTP	
			LTWRJM-00BMMA-SL7003 - Screw Type - Field Installable - Metal - IP 67	

Panel (Chassis) Mount		Mating Parts of 1 & 2		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
1  LTW-5EPFF-SC7 - Screw Type - Cat.5E - IP 67 - RJ45 or Shielded RJ45 110D or RJ45 Jack - Means Different Versions PANEL CUT-OUT 			LTW-BMMM-SL7-XX - Screw Type - Molded with Cable - IP 67 - RJ45 or Shielded RJ45 - Cat.5 or Cat.5E - Cable UTP or FTP	
			LTWRJ-00AMMA-SL7002 - Screw Type - Field Installable - With SR - RJ45 - IP 67	
2  LTWRJ-05PFFT-SC7001 - RJ45 - Cat.5 - Terminal Type - Screw Type - IP 67 PANEL CUT-OUT 			LTWRJ-00BMMA-SL7005 - Screw Type - Field Installable - Without SR - RJ45 - IP 67	

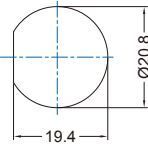
Panel (Chassis) Mount		Mating Parts of 3~5		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 3 LTWRJS-5EPFFJ-SC7  FEATURES: • Screw Type • RJ45 Jack • Cat.5E • Shielded RJ45 • IP 67 •  Means Different Versions PANEL CUT-OUT 		 LTW  BMM-SL7  XX FEATURES: • Screw Type • Molded with Cable • IP 67 •  RJ45 or Shielded RJ45 •  Cat.5 or Cat.5E •  Cable UTP or FTP		
 4 LTWRJ-5EPFFJ-SC7004 FEATURES: • Screw Type • RJ45 Jack • Cat.5E • Shielded RJ45 • IP 67 PANEL CUT-OUT 		 LTWRJ-00AMMA-SL7002 FEATURES: • Screw Type • Field Installable • With SR • RJ45 • IP 67		
 5 LTW  5EAFFM-SL7  XX FEATURES: • Screw Type • Cat.5E • IP 67 •  RJ45 or Shielded RJ45 •  Cable UTP or FTP PANEL CUT-OUT 		 LTWRJ-00BMM-SL7005 FEATURES: • Screw Type • Field Installable • Without SR • RJ45 • IP 67		

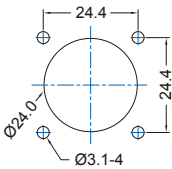
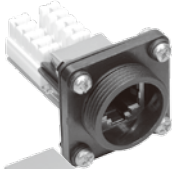
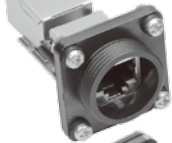
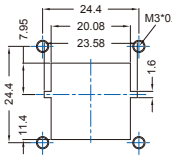
Panel (Chassis) Mount		Mating Parts of 1 & 2		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 1 LTWRJ8-5EPFFJ-SC7001 FEATURES: • RJ45 • Cat.5E • RJ45 Jack • Screw Type • IP 67 PANEL CUT-OUT 		 LTWRJ8-00AMMA-SL7002 FEATURES: • Screw Type • Field Installable • With SR • RJ45 • IP 67		
 2 LTWRS8-5EPFFJ-SC7  FEATURES: • Shielded RJ45 • Cat.5E • RJ45 Jack • Screw Type • IP 67 •  Means Different Versions PANEL CUT-OUT 		 LTWRJ8-00BMM-SL7  FEATURES: • Screw Type • Field Installable • Without SR • RJ45 • IP 67 •  Means Different Versions		
		 LTWRJ8-  BMM-SL7  X FEATURES: • Screw Type • Molded with Cable • IP 67 •  Cat.5 or Cat.5E •  Cable UTP or FTP		

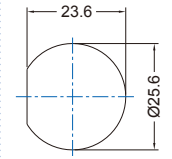
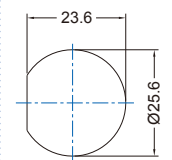
105 RJ 6P6C Screw Type (13/16"-16UN)

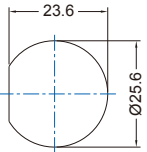
Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	LTWRJ6-00PFFJ-SC7001 FEATURES: • Screw Type • IP 67		LTWRJ6-00BMMA-SL7001 FEATURES: • Screw Type • Field Installable • Without SR • IP 67	
			LTWRJ6-00BMMM-SL7AXX FEATURES: • Screw Type • Molded with Cable • Without SR • IP 67	

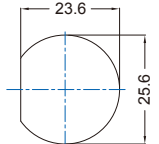
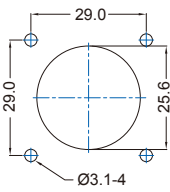
RJ 4P4C Screw Type (13/16"-16UN) 106

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	LTWRJ4-00PFFJ-SC7001 FEATURES: • Screw Type • Panel Front Mounting • IP 67		LTWRJ4-00BMMA-SL7001 FEATURES: • Assembly Type • Without SR • IP 67	
			LTWRJ4-00BMMM-SL7A^Δ FEATURES: • Molding Type • Without SR • IP 67 • ^ΔMeans Different Versions	

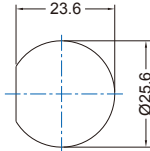
Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	LTWRJ-ΔPFFD-SS7001 FEATURES: • Screw Type • 110D • RJ45 • IP 67 • Δ Cat.5E or Cat.6		LTWRJ-00BMMA-SL7002 FEATURES: • Screw Type • Field Installable • Without SR • RJ45 • IP 67	
    PANEL CUT-OUT 	LTWRJS-ΔPFFΔ-SS7Δ FEATURES: • RJ45 Shielded • Screw Type • IP 67 • Δ 00 or Cat.5E • Δ 110D, RJ45 Jack or PCB 90 • Δ Means Different Versions		LTWRJS-ΔAMMM-SΔ7ΔXX FEATURES: • Screw Type • Molded with Cable • Shielded RJ45 • IP 67 • Δ Cat.5 or Cat.5E • Δ Availabl in Straight or Right • Δ Cable UTP or FTP	 
				

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	LTWRJS-00PFFJ-SC7001 FEATURES: • RJ45 Shielded • Screw Type • RJ45 Jack • IP 67			
 PANEL CUT-OUT 	LTWRJS-00PFFA-SC7Δ FEATURES: • RJ45 Shielded • Screw Type • Field Installable • IP 67 • Δ Means Different Versions			
	LTWRJS-00BFFA-SL7Δ FEATURES: • RJ45 Shielded • Screw Type • Field Installable • IP 67 • Δ Means Different Versions			

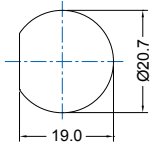
Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	LWRJS-5EPFFJ-SC7007 FEATURES: • RJ45 Shielded • Screw Type • Field Installable • IP 67			

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	LWRJM-△PFFD-S△7001 FEATURES: • Screw Type • 110D • RJ45 Shielded • IP 67 • △ Cat.5E or Cat.6 • △ Circulr or Square Backshell		LWRJ-00BMMA-SL7001 FEATURES: • Screw Type • Field Installable • Without SR • RJ45 or Shielded RJ45 • IP 67	
 PANEL CUT-OUT 			LWRJ-00BMMA-SL8003 FEATURES: • Screw Type • Field Installable • Without SR • RJ45 or Shielded RJ45 • IP 68	

111 RJ45 Plastic Lock Type (1"-20UNEF)

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	LTW△-5EPFFP-LC7001 FEATURES: • Lock Type • PCB 180 • Cat.5E • IP 67 • △ RJ45 or Shielded RJ45	 LTW△-5EAMMM-L△7△XX FEATURES: • Lock Type • Molded with cable • Cat.5E • IP 67 • △ RJ45 or RJ45 Shielded • △ Available in traight or Right • △ Cable UTP or FTP		
		 LTWRJ-00△MMA-LL7001 FEATURES: • RJ45 • Lock Type • Field Installable • IP 67 • △ With or Without SR		

RJ45 to M12 A-Coded Adaptor 112

Panel (Chassis) Mount		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	LTWRJS-12A08FM-RS6001 FEATURES: • RJ45 Shielded • M12 D-Coded • Screw Type • IP 66			 

XXX - XX X X X X - X X X XXX

Number of Contacts

- 02, 03,08 Pin

Style

- A – For Cable with S/R
- B – For Cable without S/R
- P – For Panel

Connector Style

- M – Male Connector
- F – Female Connector

Contact Type

- M – Male
- F – Female
- I – I style

Specification

M8 Size:

- 8 – M8 Sensor Connector
- 8P – M8 Plastic Sensor Connector

M10.5 Size:

- 105 – M10.5 Sensor Connector

M12 Size:

- 12 – M12 M12 I-Style Sensor Connector
- 12L – M12 LED Sensor Connector
- 12P – M12 M12 I-Style Plastic Sensor Connector
- 12S – M12 Shield Sensor Connector
- 12B – M12 B-Coded Sensor Connector
- SBL – M12 B-Coded LED Sensor Connector
- SBP – M12 B-Coded Plastic Sensor Connector
- SBS – M12 B-Coded Shield Sensor Connector
- 12D – M12 D-Coded Sensor Connector
- SDL – M12 D-Coded LED Sensor Connector
- SDP – M12 D-Coded Plastic Sensor Connector
- SDS – M12 D-Coded Shield Sensor Connector

Waterproof Rating

- 5 = IP 65
- 6 = IP 66
- 7 = IP 67
- 8 = IP 68

Version

- 000 : Phantom
- Without Cable 001, 002,.....
- For Cable
- A01 - 1M ~ A99 - 99M
- A – PVC UL2464 Cable
- B – PU VW-1 Cable

Back Shell

- L – Straight (180° For Cable Type)
- R – Right Angle (90° For Cable Type)
- C – Circular (For Panel Type)
- F – Front Hexagonal (For Panel Type)
- H – Rear Hexagonal (For Panel Type)

Mating Style

- L – Lock
- S – Screw
- Q – Quick

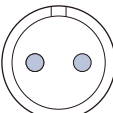
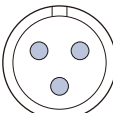
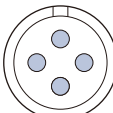
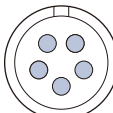
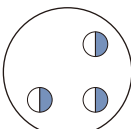
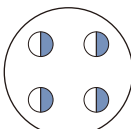
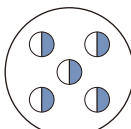
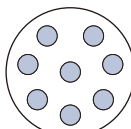
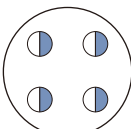
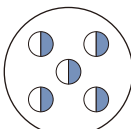
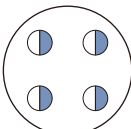
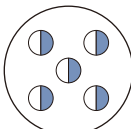
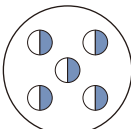
Assembly Style

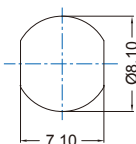
- M – Molding Type
- A – Assembly Type (Solder) Pins
- B – Assembly Type (Screw) Pins
- C – Assembly Type (IDC) Pins
- S – Solder Type
- P – PCB Type (180°)
- R – PCB Type (90°)

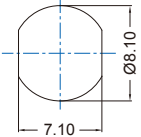
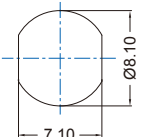
SPECIFICATIONS

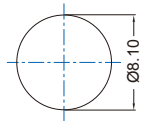
No.	Specifications	Standard Value
01. Identifications		M8, M10.5, M12, M12 B-Coded, M12 D-Coded, M12 I-Style
02. Description		Panel Mount, Molded with Cable and Field Installable
03. Current Rating / Pin Arrangements		M8: 5A: 3 and 4 M10.5: 2A: 2 to 5 M12: 2A: 8, 5A: 3 to 5 M12 B-Coded: 5A: 4 and 5 M12 D-Coded: 5A: 4 and 5 M12 I-Style: 5A: 5
04. Material		Contacts: Copper Alloy, Gold Plated Connector Body: Nylon+GF or PU, UL Recognized Shield: Zinc Alloy or Copper Alloy, Nickel Plated
05. Temperature Range		Cable: -25°C to +90°C (PU) -20°C to +80°C (PVC) Connector Body: -25°C to +90°C
06. Waterproof Rating		IP65, IP66, IP67, IP68
07. Contact Resistance		≤10MΩ
08. Insulation Resistance		≥100mΩ at DC 500V
09. Breakdown Voltage		≥AC 500V / 1 Minute
10. Standard Cable Length (for Molded Cable)		1–99M (Standard Cable: UL2464 PVC Jacket or PU)
11. Field Installable		All Solder Contacts Unless And Otherwise Indicated

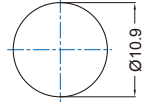
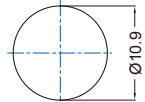
CONTACT PIN ARRANGEMENT

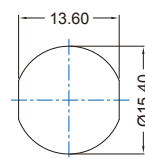
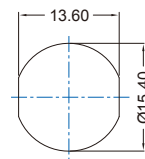
M8				
	5A:3	5A:4		
M10.5				
	2A:2	2A:3	2A:4	2A:5
M12				
	5A:3	5A:4	5A:5	2A:8
M12 B-Coded				
	5A:4	5A:5		
M12 D-Coded				
	5A:4	5A:5		
M12 I Style				
	5A:5			
 2A  5A  Female Connector Female Pin  Male Connector Male Pin  Female Connector Male Pin  Male Conn Female Pin				

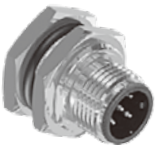
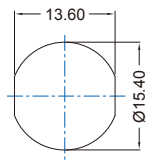
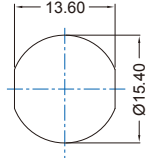
Female Connector		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTW8-△PFFS-SH7△ FEATURES: • Screw Type • Rear Mounting • Solder Contacts • IP 67 • △ Available in 3 and 4 Pins • △ Means Different Versions 		LTW8-△AMMM-SL7△XX FEATURES: • Screw Type with SR • 180° Molded with Cable • △ Available in 3 and 4 Pins • △ Available in PVC or PU Cable • IP 67	 Cap-Screw (for Female)
			LTW8-△AMMM-SR7△XX FEATURES: • Screw Type with SR • 90° Molded with Cable • △ Available in 3 and 4 Pins • △ Available in PVC or PU Cable • IP 67	
			LTW8-△BMMM-SL7△XX FEATURES: • Screw Type without SR • 180° Molded with Cable • △ Available in 3 and 4 Pins • △ Available in PVC or PU Cable • IP 67	
			LTW8-△BMMM-SR7△XX FEATURES: • Screw Type without SR • 90° Molded with Cable • △ Available in 3 and 4 Pins • △ Available in PVC or PU Cable • IP 67	
			LTW8P-04BMMB-SL7001 FEATURES: • Screw Type • Screw in Termination • 180° Field Installable • IP 67	

Male Connector		Mating Parts of 1 & 2		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 1 PANEL CUT-OUT 	LTW8-△PMMS-SH7△ FEATURES: - Screw Type - Rear mounting - Solder Contacts - IP 67 △ Available in 3 and 4 Pins △ Means Different Versions	 LTW8-△AFFM-SL7△XX FEATURES: - Screw Type with SR 180° Molded with Cable △ Available in 3 and 4 Pins △ Available in PVC or PU Cable - IP 67	LTW8-△AFFM-SL7△XX	 Cap-Screw (for Female)
		 LTW8-△AFFM-SR7△XX FEATURES: - Screw Type with SR 90° Molded with Cable △ Available in 3 and 4 Pins △ Available in PVC or PU Cable - IP 67	LTW8-△AFFM-SR7△XX	
		 LTW8-△BFFM-SL7△XX FEATURES: - Screw Type without SR 180° Molded with Cable △ Available in 3 and 4 Pins △ Available in PVC or PU Cable - IP 67	LTW8-△BFFM-SL7△XX	
 2 PANEL CUT-OUT 	LTW8-△PMM△-SF7△ FEATURES: - Screw Type - Hexagonal Backshell - Solder Contacts - IP 67 △ Available in 3 and 4 Pins △ Solder or PCB Contacts △ Means Different Versions	 LTW8-△BFFM-SR7△XX FEATURES: - Screw Type without SR 90° Molded with Cable △ Available in 3 and 4 Pins △ Available in PVC or PU Cable - IP 67	LTW8-△BFFM-SR7△XX	 Cap-Screw (for Male)
		 LTW8P-04BFFB-SL7001 FEATURES: - Screw Type - Screw in Termination 180° Field Installable - IP 67 5A: 4	LTW8P-04BFFB-SL7001	

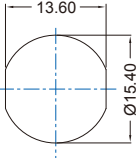
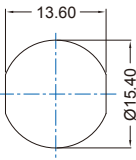
Male Connector		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 1 PANEL CUT-OUT 	LTW8P-△PMM△-SF7△ FEATURES: - Quick Type - Screw Type - Hexagonal Backshell - IP 67 △ Available in 3 and 4 Pins △ Solder or PCB Contacts △ Means Different Versions	 LTW8P-△AFFM-QL5△XX FEATURES: - Quick Type with Strain Relief 180° Molded with Cable △ Available in 3 and 4 Pins △ Available in PVC or PU Cable - IP 65 • Only for 1	LTW8P-△AFFM-QL5△XX	 Cap-Screw (for Female)
	LTW8P-04BMMB-SL7001 FEATURES: - Screw Type - Screw in Termination 180° Field Installable - IP 67 5A: 4 Pins	 LTW8P-04BFFB-SL7001 FEATURES: - Screw Type - Screw in Termination 180° Field Installable - IP 67 5A: 4 Pins • Only for 2	LTW8P-04BFFB-SL7001	
	LTW8P-△AMMM-SL7△XX FEATURES: - Screw Type with SR 180° Molded with Cable △ Available in 3 and 4 Pins △ Available in PVC or PU Cable	 LTW8P-△AFFM-SL7△XX LTW8P-△AFFM-SR7△XX FEATURES: - Screw Type with SR 180° Molded with Cable 90° Molded with Cable △ Available in 3 and 4 Pins △ Available in PVC or PU Cable • Only for 3 and 4	LTW8P-△AFFM-SL7△XX LTW8P-△AFFM-SR7△XX	
 2	LTW8P-△AMMM-SR7△XX FEATURES: - Screw Type with SR 90° Molded with Cable △ Available in 3 and 4 Pins △ Available in PVC or PU Cable	 LTW8P-△BFFM-SL7△XX LTW8P-△BFFM-SR7△XX FEATURES: - Screw Type without SR 180° Molded with Cable 90° Molded with Cable △ Available in 3 and 4 Pins △ Available in PVC or PU Cable • Only for 3 and 4	LTW8P-△BFFM-SL7△XX LTW8P-△BFFM-SR7△XX	 Cap-Screw (for Male)
	LTW8P-△BMMB-SL7△XX FEATURES: - Screw Type without SR 180° Molded with Cable △ Available in 3 and 4 Pins △ Available in PVC or PU Cable	 LTW8P-△BFFM-SL7△XX LTW8P-△BFFM-SR7△XX FEATURES: - Screw Type without SR 180° Molded with Cable 90° Molded with Cable △ Available in 3 and 4 Pins △ Available in PVC or PU Cable • Only for 3 and 4	LTW8P-△BFFM-SL7△XX LTW8P-△BFFM-SR7△XX	
	LTW8P-△BMMB-SR7△XX FEATURES: - Screw Type without SR 90° Molded with Cable △ Available in 3 and 4 Pins △ Available in PVC or PU Cable			

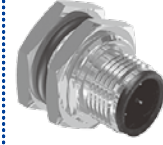
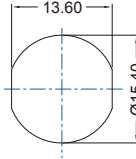
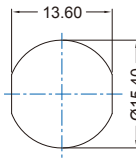
Panel (Chassis) Mount		Mating Parts of 1 & 2		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	 LTW105-△PMFS-SC7001 FEATURES: • Screw Type • Solder Contacts • Circular Rear Mounting • IP 67 • △ Available in 2 to 5 Pins	 LTW105-△AFMM-SL7AXX FEATURES: • Screw Type with SR • 180° Molded with Cable • PVC Cable • △ Available in 2 to 5 Pins • IP 67		
	 LTW105-△PMFS-SH7001 FEATURES: • Screw Type • Solder Contacts • Hexagonal Rear Mounting • IP 67 • △ Available in 2 to 5 Pins	 LTW105-△AFMM-SR7AXX FEATURES: • Screw Type with SR • 90° Molded with Cable • PVC Cable • △ Available in 2 to 5 Pins • IP 67		
 PANEL CUT-OUT 		 LTW105-△BFMM-SL7AXX FEATURES: • Screw Type without SR • 180° Molded with Cable • PVC Cable • △ Available in 2 to 5 Pins • IP 67		
		 LTW105-△BFMM-SR7AXX FEATURES: • Screw Type without SR • 90° Molded with Cable • PVC Cable • △ Available in 2 to 5 Pins • IP 67		

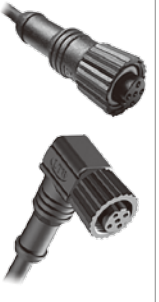
Panel (Chassis) Mount		Mating Parts of 1 & 2		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	 LTW12-△PFFS-SF8△ FEATURES: • Screw Type • Hexagonal Backshell • Solder Contacts • IP 68 • △ Available in 3, 4, 5 and 8 Pins (2A: 8, 5A: 3 to 5) • △ Means Different Versions	 LTW12-△AMMM-SL7△XX LTW12-△AMMM-SR7△XX FEATURES: • Screw Type with SR • 180° or 90° Molded with Cable • △ 2A: 8 Pins, 5A: 3 to 5 Pins • △ Available in PVC or PU Cable • IP 67	 Cap-Screw (for Female)	
	 LTW12-△PFFP-SF8△ FEATURES: • Screw Type • Hexagonal Backshell • PCB Contacts • IP 68 • △ Available in 3, 4, 5 and 8 Pins (2A: 8, 5A: 3 to 5) • △ Means Different Versions	 LTW12-△BMMM-SL8△XX LTW12-△BMMM-SR8△XX FEATURES: • Screw Type without SR • 180° or 90° Molded with Cable • △ 2A: 8 Pins, 5A: 3 to 5 Pins • △ Available in PVC or PU Cable • IP 68	 T Cable	
 PANEL CUT-OUT 		 LTW12S-△BMMM-SL7△XX FEATURES: • Screw Type Shielded without SR • 180° Molded with Cable • △ 2A: 8 Pins, 5A: 3 to 5 Pins • △ Available in PVC or PU Cable • IP 67	 T Adaptor	
		 LTW12-△BMMA-SL8001 FEATURES: • Screw Type • Solder Contacts • Field Installable • IP 68 • △ 2A: 8 Pins, 5A: 3 to 5 Pins	 I Adaptor	
		 LTW12-△BMMA-SL7001 LTW12-△BMMA-SR7001 FEATURES: • Screw Type • Screw in Termination • 180° or 90° Field Installable • IP 67 • △ 5A: 3 to 5 Pins		
		 LTWSS-△0000-M00-YSBXX FEATURES: • Screw Type • Y Cable Adaptor • PU Cable • IP 68 • △ 2A: 8 Pins, 5A: 3 to 5 Pins	 Y Adaptor	

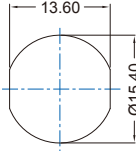
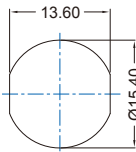
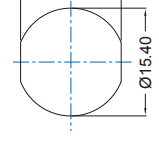
Panel (Chassis) Mount		Mating Parts of 1 & 2		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
1  PANEL CUT-OUT 	LTW12-△PMMS-SF8△ FEATURES: - Screw Type - Hexagonal Backshell - Solder Contacts - IP 68 △ Available in 3, 4, 5 and 8 Pins △ Means Different Versions 2A: 8 Pins, 5A: 3 to 5 Pins	 LTW12-△AFFM-SL7△XX LTW12-△AFFM-SR7△XX FEATURES: - Screw Type with SR 180° or 90° Molded with Cable △ 2A: 8 Pins, 5A: 3 to 5 Pins △ Available in PVC or PU Cable - IP 67	 Cap-Screw (for Male)	
	LTW12-△PMMP-SF8△ FEATURES: - Screw Type - Hexagonal Backshell - PCB Contacts - IP 68 △ Available in 3, 4, 5 and 8 Pins △ Means Different Versions 2A: 8 Pins, 5A: 3 to 5 Pins	 LTW12-△BFFM-SL8△XX LTW12-△BFFM-SR8△XX FEATURES: - Screw Type without SR 180° or 90° Molded with Cable △ 2A: 8 Pins, 5A: 3 to 5 Pins △ Available in PVC or PU Cable - IP 68	 T Cable	
		 LTW12S-△BFFM-SL7△XX FEATURES: - Screw Type Shielded without SR 180° Molded with Cable △ 2A: 8 Pins, 5A: 3 to 5 Pins △ Available in PVC or PU Cable - IP 67		
2  PANEL CUT-OUT 		 LTW12L-03BFFM-SR7△XX FEATURES: - Screw Type w/LED without SR 90° Molded with Cable △ 5A: 4 to 5 Pins △ Available in PVC or PU Cable	 I Adaptor	
	LTW12-△PMMS-SH8△ FEATURES: - Screw Type - Rear Mounting - Solder Contacts - IP 68 △ Available in 3, 4, 5 and 8 Pins △ Means Different Versions	 LTW12-△BFFA-SL8001 FEATURES: - Screw Type - Solder Contacts - Field Installable △ 2A: 8 Pins, 5A: 3 to 5 Pins - IP 68		
		 LTW12-△BFFB-SL7001 LTW12-△BFFB-SR7001 FEATURES: - Screw Type - Screw in Termination 180° or 90° Field Installable △ 5A: 3 to 5 Pins	 Y Adaptor	
		 LTWSS-△0000-F00-YSBXX FEATURES: - Screw Type - Y Cable Adaptor - PU Cable △ 2A: 8 Pins, 5A: 3 to 5 Pins		

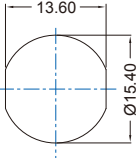
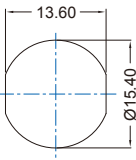
Male Connector		Mating Parts 1~2		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
1 	LTW12P-△BMMA-SL8001 FEATURES: • Screw Type • Solder Contracts • Field Installable • IP 68 • △ Available in 3, 4, 5 and 8 Pins (2A: 8, 5A: 3 to 5)	 	LTW12P-△BFFM-SL8△XX LTW12P-△BFFM-SR8△XX FEATURES: • Screw Type without SR • 180° or 90° Molded with Cable • IP 68 • △ Available in 3, 4, 5 and 8 Pins (2A: 8, 5A: 3 to 5) • △ Available in PVC or PU Cable	
			LTW12P-△BFFA-SL8001 FEATURES: • Screw Type • Solder Contacts • Field Installable • IP 68 • △ Available in 3, 4, 5 and 8 Pins (2A: 8, 5A: 3 to 5)	 Cap-Screw (for Female)
2 	LTW12P-△BMMM-SL8△XX LTW12P-△BMMM-SR8△XX FEATURES: • Screw Type without SR • 180° or 90° Molded with Cable • IP 68 • △ Available in 3, 4, 5 and 8 Pins (2A: 8, 5A: 3 to 5) • △ Available in PVC or PU Cable	 	LTW12P-△BFFB-SL7001 LTW12P-△BFFB-SR7001 FEATURES: • Screw Type • Screw in Termination • Field Installable • IP 67 • △ Available in 3, 4 and 5 Pins (5A: 3 to 5)	
			LTW12P-△PFFP-SF8001 FEATURES: • Screw Type • PCB Contacts • Hexagonal Backshell • IP 68 • △ Available in 3, 4, 5 and 8 Pins (2A: 8, 5A: 3 to 5) • Only for 1 and 3	 Cap-Screw (for Male)
3 	LTW12P-△BMMB-SL7001 LTW12P-△BMMB-SR7001 FEATURES: • Screw Type • Screw in Termination • Field Installable • IP 67 • △ SL7001: Available in 4, 5 Pins • SR7001: Available in 3, 4, 5 Pins		LTW12P-△PFFS-SF8001 FEATURES: • Screw Type • Solder Contacts • Hexagonal Backshell • IP 68 • △ Available in 3, 4, 5 and 8 Pins (2A: 8, 5A: 3 to 5) • Only for 1 and 3	

Panel (Chassis) Mount		Mating Parts of 1 & 2		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 1 PANEL CUT-OUT 	LTW12B-△PFFS-SF8△ LTW12B-△PFFP-SF8△ LTW12B-3PFFS-SF8△	 LTW12B-△BMMM-SL8△XX  LTW12B-△BMMM-SR8△XX	FEATURES: • Screw Type without SR • 180° or 90° Molded with Cable • IP 68 • △ Available in 4 and 5 Pins • △ Available in PVC or PU Cable	 Cap-Screw (for Female)  Cap-Screw (for Male)
	FEATURES: • Screw Type • Hexagonal Backshell • Front Mounted • Solder or PCB Contacts • IP 68 • △ Available in 3, 4 and 5 Pins • △ Means Different Versions	 LTW12B-△BMMA-SL8001	FEATURES: • Screw Type • Solder Contacts • Field Installable • IP 68 • △ Available in 3, 4 and 5 Pins	 T Cable
 2 PANEL CUT-OUT 	LTW12B-△PFFS-SH8△	 LTW12B-△BMMB-SL7001  LTW12B-△BMMB-SR7001	FEATURES: • Screw Type • Screw in Termination • Field Installable • 180° or 90° Field Installable • IP 67 • △ Available in 4 and 5 Pins	 T Adaptor  I Adaptor
	FEATURES: • Screw Type • Rear Mounting • Solder Contacts • IP 68 • △ Available in 3, 4 and 5 Pins • △ Means Different Versions	 LTWSB-△0000-M00-YSBXX	FEATURES: • Screw Type • Y Cable Adaptor • PU Cable • IP 68 • △ Available in 4 and 5 Pins	 Y Adaptor

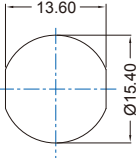
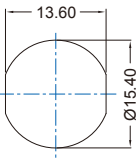
Panel (Chassis) Mount		Mating Parts of 1 & 2		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 1 PANEL CUT-OUT 	LTW12B-△PMMS-SF8△ LTW12B-△PMMP-SF8△ LTW12B-3PMMS-SF8△	 LTW12B-△BFFM-SL8△XX  LTW12B-△BFFM-SR8△XX	FEATURES: • Screw Type • 180° or 90° In-Line Molded Type (Cable to Cable) without SR • IP 68 • △ Available in 4 and 5 Pins • △ Available in PVC or PU Cable	 Cap-Screw (for Female)  Cap-Screw (for Male)
	FEATURES: • Screw Type • Hexagonal Backshell • Solder or PCB Contacts • IP 68 • △ Available in 4 and 5 Pins • △ Means Different Versions	 LTW12B-△BFFA-SL8001	FEATURES: • Screw Type • Solder Contacts • Field Installable • IP 68 • △ Available in 3, 4 and 5 Pins	 T Cable
 2 PANEL CUT-OUT 	LTW12B-△PMMS-SH8△	 LTW12B-△BFFB-SL7001  LTW12B-△BFFB-SR7001	FEATURES: • Screw Type • Screw in Termination • Field Installable • 180° or 90° Field Installable • IP 67 • △ Available in 4 and 5 Pins	 T Adaptor  I Adaptor
	FEATURES: • Screw Type • Rear Mounting • Solder Contacts • IP 68 • △ Available in 3, 4 and 5 Pins • △ Means Different Versions	 LTWSB-△0000-F00-YSBXX	FEATURES: • Screw Type • Y Cable Adaptor • PU Cable • IP 68 • △ Available in 4 and 5 Pins	 Y Adaptor

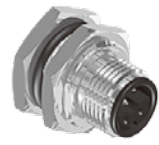
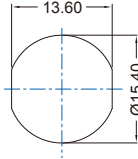
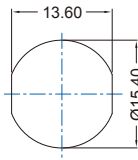
Male Connector		Mating Parts of 1~3		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWSBP-△BMMM-SL&△XX LTWSBP-△BMMM-SR&△XX FEATURES: • Screw Type without SR • 180° or 90° Molded with Cable • Solder or PCB Contacts • IP 68 • △ Available in 4 and 5 Pins • △ Available in PVC or PU Cable		LTWSBP-△BFFM-SL&△XX LTWSBP-△BFFM-SR&△XX FEATURES: • Screw Type • 180° or 90° In-Line Molded Type (Cable to Cable) without SR • IP 68 • △ Available in 4 and 5 Pins • △ Available in PVC or PU Cable	 Cap-Screw (for Male)
	LTWSBP-△BMMA-SL8001 FEATURES: • Screw Type • Solder Contacts • Field Installable • IP 68 • △ Available in 3, 4 and 5 Pins		LTWSBP-△BFFA-SL8001 FEATURES: • Screw Type without SR • Solder Contacts • Field Installable • IP 68 • △ Available in 3, 4 and 5 Pins	
	LTWSBP-△BMMA-SL7001 LTWSBP-△BMMA-SR7001 FEATURES: • Screw Type • Screw in Termination • 180° or 90° Field Installable • IP 67 • △ Available in 4 and 5 Pins		LTWSBP-△BFFB-SL7001 LTWSBP-△BFFB-SR7001 FEATURES: • Screw Type • Solder Type • Screw in Termination • 180° or 90° Field Installable • IP 67 • △ Available in 4 and 5 Pins	 Cap-Screw (for Female)

Panel (Chassis) Mount		Mating Parts of 1 & 2		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 PANEL CUT-OUT 	LTW12D-△PFFS-SF8△ LTW12D-△PFFP-SF8△ LTW12D-3PFFP-SF8△ FEATURES: • Screw Type • Hexagonal Backshell • Front Mounted • Solder or PCB Contacts • IP 68 • △ Available in 3, 4 and 5 Pins • △ Means Different Versions		LTW12D-△BMMM-SL&△XX LTW12D-△BMMM-SR&△XX FEATURES: • Screw Type without SR • 180° or 90° Molded with Cable • IP 68 • Available in 4 and 5 Pins • Available in PVC or PU Cable • △	 Cap-Screw (for Female)
 PANEL CUT-OUT 	LTW12D-△PFFS-SH8△ FEATURES: • Screw Type • Rear Mounting • Solder Contacts • IP 68 • △ Available in 3, 4 and 5 Pins • △ Means Different Versions		LTW12D-△BMMA-SL8001 FEATURES: • Screw Type • Solder Contacts • Field Installable • IP 68 • △ Available in 3, 4 and 5 Pins	 T Cable   T Adaptor   I Adaptor   Y Adaptor
 PANEL CUT-OUT 	LTW12D-△PFFS-SH8△ FEATURES: • Screw Type • Rear Mounting • Solder Contacts • IP 68 • △ Available in 3, 4 and 5 Pins • △ Means Different Versions		LTW12D-△BMMA-SL8001 FEATURES: • Screw Type • Solder Contacts • Field Installable • IP 68 • △ Available in 3, 4 and 5 Pins	
 PANEL CUT-OUT	LTW12D-△PFFS-SH8△ FEATURES: • Screw Type • Rear Mounting • Solder Contacts • IP 68 • △ Available in 3, 4 and 5 Pins • △ Means Different Versions		LTW12D-△BMMA-SL8001 FEATURES: • Screw Type • Solder Contacts • Field Installable • IP 68 • △ Available in 3, 4 and 5 Pins	

Panel (Chassis) Mount		Mating Parts of 1 & 2		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 1 LTW12D-△PMMS-SF8△ LTW12D-△PMMP-SF8△ LTW12D-3PMMS-SF8△ PANEL CUT-OUT 	FEATURES: • Screw Type • Hexagonal Backshell • Front Mounted • Solder or PCB Contacts • IP 68 • △ Available in 3, 4 and 5 Pins • △ Means Different Versions	 LTW12D-△BFFM-SL8△XX LTW12D-△BFFM-SR8△XX FEATURES: • Screw Type • 180° or 90° In-Line Molded Type (Cable to Cable) without SR • IP 68 • △ Available in 4 and 5 Pins • △ Available in PVC or PU Cable	LTW12D-△BFFA-SL8001 FEATURES: • Screw Type • Solder Contacts • Field Installable • IP 68 • △ Available in 3, 4 and 5 Pins	 Cap-Screw (for Female)
		 LTW12D-△BFFB-SL7001 LTW12D-△BFFB-SR7001 FEATURES: • Screw Type • Screw in Termination • 180° or 90° Field Installable • IP 67 • △ Available in 4 and 5 Pins	LTWSD-△000-F00-YSBXX FEATURES: • Screw Type • Y Cable Adaptor • PU Cable • IP 68 • △ 5A: 4 and 5	 T Cable   T Adaptor   I Adaptor   Y Adaptor
 2 LTW12D-△PMMS-SH8△ PANEL CUT-OUT 	FEATURES: • Screw Type • Rear Mounted • Solder Contacts • IP 68 • △ Available in 3, 4 and 5 Pins • △ Means Different Versions	 LTWSDP-△BMMM-SL8△XX LTWSDP-△BMMM-SR8△XX FEATURES: • Screw Type • 180° or 90° In-Line Molded Type (Cable to Cable) without SR • PVC or PU Cable • IP 68 • △ Available in 4 and 5 Pins • △ Available in PVC or PU Cable	LTWSDP-△BFFA-SL8001 FEATURES: • Screw Type • Solder Contacts • Field Installable • IP 68 • △ Available in 3, 4 and 5 Pins	 Cap-Screw (for Male)
		 LTWSDP-△BFFB-SL7001 LTWSDP-△BFFB-SR7001 FEATURES: • Screw Type • Screw in Termination • 180° or 90° Field Installable • IP 67 • △ Available in 4 and 5 Pins	LTWSDP-△BMMB-SL7001 LTWSDP-△BMMB-SR7001 FEATURES: • Screw Type • Screw in Termination • 180° or 90° Field Installable • IP 67 • △ Available in 4 and 5 Pins	 Cap-Screw (for Female)

Male Connector		Mating Parts of 1 ~ 3		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 1 LTWSDP-△BMMM-SL8△XX LTWSDP-△BMMM-SR8△XX FEATURES: • Screw Type • 180° or 90° In-Line Molded Type (Cable to Cable) without SR • PVC or PU Cable • IP 68 • △ Available in 4 and 5 Pins • △ Available in PVC or PU Cable	FEATURES: • Screw Type • 180° or 90° In-Line Molded Type (Cable to Cable) without SR • PVC or PU Cable • IP 68 • △ Available in 4 and 5 Pins • △ Available in PVC or PU Cable	 LTWSDP-△BFFM-SL8△XX LTWSDP-△BFFM-SR8△XX FEATURES: • Screw Type without SR • 180° or 90° In-Line Molded Type (Cable to Cable) without SR • IP 68 • △ Available in 4 and 5 Pins • △ Available in PVC or PU Cable	LTWSDP-△BFFA-SL8001 FEATURES: • Screw Type • Solder Contacts • Field Installable • IP 68 • △ Available in 3, 4 and 5 Pins	 Cap-Screw (for Male)
		 LTWSDP-△BMMB-SL7001 LTWSDP-△BMMB-SR7001 FEATURES: • Screw Type • Screw in Termination • 180° or 90° Field Installable • IP 67 • △ Available in 4 and 5 Pins	LTWSDP-△BFFB-SL7001 LTWSDP-△BFFB-SR7001 FEATURES: • Screw Type • Screw in Termination • 180° or 90° Field Installable • IP 67 • △ Available in 4 and 5 Pins	 Cap-Screw (for Female)
 2 LTWSDP-△BMMB-SL7001 LTWSDP-△BMMB-SR7001 FEATURES: • Screw Type • Screw in Termination • 180° or 90° Field Installable • IP 67 • △ Available in 4 and 5 Pins	FEATURES: • Screw Type • Screw in Termination • 180° or 90° Field Installable • IP 67 • △ Available in 4 and 5 Pins	 LTWSDP-△BFFM-SL8△XX LTWSDP-△BFFM-SR8△XX FEATURES: • Screw Type without SR • 180° or 90° In-Line Molded Type (Cable to Cable) without SR • IP 68 • △ Available in 4 and 5 Pins • △ Available in PVC or PU Cable	LTWSDP-△BFFA-SL8001 FEATURES: • Screw Type • Solder Contacts • Field Installable • IP 68 • △ Available in 3, 4 and 5 Pins	 Cap-Screw (for Male)
		 LTWSDP-△BFFB-SL7001 LTWSDP-△BFFB-SR7001 FEATURES: • Screw Type • Screw in Termination • 180° or 90° Field Installable • IP 67 • △ Available in 4 and 5 Pins	LTWSDP-△BMMB-SL7001 LTWSDP-△BMMB-SR7001 FEATURES: • Screw Type • Screw in Termination • 180° or 90° Field Installable • IP 67 • △ Available in 4 and 5 Pins	 Cap-Screw (for Female)

Male Connector		Mating Parts of 1 & 2		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 1 LTW12-05PFIS-SF8△ LTW12-05PFIP-SF8△ FEATURES: • Screw Type • Hexagonal Backshell • Front Mounted • Solder or PCB Contacts • IP 68 • △ Means Different Versions • 5A: 5 PANEL CUT-OUT 		 LTW12-05AMIM-SL7△XX LTW12-05AMIM-SR7△XX FEATURES: • Screw Type • 180° or 90° In-Line Molded Type (Cable to Cable) with SR • IP 67 • △ Available in PVC or PU Cable • 5A: 5 Cap-Screw (for Female) 		 Cap-Screw (for Male)
		 LTW12-05BMIM-SL8△XX LTW12-05BMIM-SR8△XX FEATURES: • Screw Type • 180° or 90° In-Line Molded Type (Cable to Cable) without SR • IP 68 • △ Available in PVC or PU Cable • 5A: 5 T Cable UPON REQUEST 		 T Adaptor UPON REQUEST 
 2 LTW12-05PFIS-SH8△ FEATURES: • Screw Type • Rear Mounting • Solder Contacts • IP 68 • △ Means Different Versions • 5A: 5 PANEL CUT-OUT 		 LTW12-05BMIA-SL8001 FEATURES: • Screw Type • Solder Contacts • Field Installable • IP 68 • 5A: 5 I Adaptor UPON REQUEST 		 Y Adaptor UPON REQUEST 
		 LTWSI-050000-M00-YSBXX FEATURES: • Screw Type • Y Cable Adaptor • PVC or PU Cable • IP 68 • 5A: 5 Y Adaptor		

Male Connector		Mating Parts of 1 & 2		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 1 LTW12-05PMIS-SF8△ LTW12-05PMIP-SF8△ FEATURES: • Screw Type • Hexagonal Backshell • Front Mounted • Solder or PCB Contacts • IP 68 • △ Means Different Versions • 5A: 5 PANEL CUT-OUT 		 LTW12-05AFIM-SL7△XX LTW12-05AFIM-SR7△XX FEATURES: • Screw Type • 180° or 90° In-Line Molded Type (Cable to Cable) with SR • IP 67 • △ Available in PVC or PU Cable • 5A: 5 Cap-Screw (for Female) 		 Cap-Screw (for Male)
		 LTW12-05BFIM-SL8△XX LTW12-05BFIM-SR8△XX FEATURES: • Screw Type • 180° or 90° In-Line Molded Type (Cable to Cable) without SR • IP 68 • △ Available in PVC or PU Cable • 5A: 5 T Cable UPON REQUEST 		 T Adaptor UPON REQUEST 
 2 LTW12-05PMIS-SH8△ FEATURES: • Screw Type • Rear Mounted • Solder Contacts • IP 68 • △ Means Different Versions • 5A: 5 PANEL CUT-OUT 		 LTW12-05BFIA-SL8001 FEATURES: • Screw Type • Solder Contacts • Field Installable • IP 68 • 5A: 5 I Adaptor UPON REQUEST 		 Y Adaptor UPON REQUEST 
		 LTWSI-050000-F00-YSBXX FEATURES: • Screw Type • Y Cable Adaptor • PVC or PU Cable • IP 68 • 5A: 5 Y Adaptor		

Male Connector		Mating Parts of 1 & 2		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 	1 LTW12P-05BMIM-SL8△XX LTW12P-05BMIM-SR8△XX FEATURES: • Screw Type • 180° or 90° In-line Molded Type (Cable to Cable) without SR • △ Available PVC or PU Cable • IP 67 or IP 68 • 5A: 5	 	LTW12P-05BFIM-SL8△XX LTW12P-05BFIM-SR8△XX FEATURES: • Screw Type without SR • 180° or 90° In-line Molded Type (Cable to Cable) without SR • △ Available in PVC or PU Cable • IP 67 or IP 68 • 5A: 5	 Cap-Screw (for Male)
	2 LTW12P-05BMIA-SL8001 FEATURES: • Screw Type • Solder Contacts • Field Installable • IP 68 • 5A: 5		LTW12P-05BFIA-SL8001 FEATURES: • Screw Type • Solder Contacts • Field Installable • IP 68 • 5A: 5	

XXX - XX X X X X - X X X XXX

Number of Contacts

- 01 – 01 Pin

Style

- A – For Cable With S/R
- B – For Cable Without S/R
- P – For Panel Front Mounting
- R – For Panel Rear Mounting
- D – For Box Panel

Specification

- SPC – Solar Power 30A

Connector Style

- M – Male Connector
- F – Female Connector
- C – Female And Male Connector

Contact Type

- M – Male
- F – Female
- C – Female And Male

Assembly Style

- M – Molding Type
- A – Assembly Type
- P – PCB Type (180°)
- S – Solder or Crimp Type

Mating Style

- L – Lock
- S – Screw
- Q – Quick

Back Shell

- L – Straight Mounting (180° For Cable Type)
- C – Circular Straight (180° For Panel Type)

Waterproof Rating

- 6 = IP 66
- 7 = IP 67
- 8 = IP 68

Version

- 000 : Phantom
- Without Cable 001, 002,.....
- For Cable X01 - 0.1M ~ X20 - 2.0M
- X:
 - A – WCA00010373
 - B – WCA00010430
 - C – WCA00010590
 - D – WCA00010591
 - E – WCA00010592
 - F – WCA00010593

SBOX - XXX X X - XXX**Specification**

- SBOX – Solar Junction Box

Connector

Size 130×130mm dip Type

- Solar Junction Box – SJA

Size 100×80mm dip Type

- Solar Junction Box – SJB

Size 130×130mm SMD Type

- Solar Junction Box – SJC

No. of Cable Glands

- 0 – Panel Connector 1F1M
- 1 – 1 Cable Gland
- 2 – 2 Cable Glands
- 4 – 4 Cable Glands
- 5 – 5 Cable Glands
- 6 – 6 Cable Glands
- 7 – 7 Cable Glands

Version

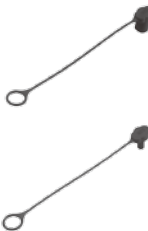
- Without Cable
001, 002,
- For Cable
X01 - 0.1M ~ X20 - 2.0M
X:
 - A – WCA00010373
 - B – WCA00010430
 - C – WCA00010590
 - D – WCA00010591
 - E – WCA00010592
 - F – WCA00010593

No. of Connectors or Solar

- 0 – 0 Connectors
- 1 – 1 Connector
- 2 – 2 Connectors
- 4 – 4 Connectors
- 6 – 6 Connectors

SPECIFICATIONS

No. Specifications	Standard Value	
01. Description	6 Core, 3 Core	Panel Mount, Field Installable, with snap-in locking
02. Current Rating	8A (Current through diode) 20A (Current not through diode)	30A
03. Material	Contacts: Copper Alloy, Gold Plated Body: PPO	Contacts: Copper Alloy, Gold Plated Body: PPO
04. Temperature Range	-40°C to +90°C	-40°C to +90°C
05. Waterproof Rating	IP66	IP67
06. Contact Resistance	≤5mΩ	≤5mΩ
07. Insulation Resistance	≥1000MΩ / 1 minute	≥1000MΩ / 1 minute
08. Durability	non	50 cycles
09. Work Voltage	200V DC	200V DC
10. Rated voltage	1000V DC	1000V DC
11. Rated impulse Voltage	8kV / 1minute	6kV / 1minute
12. Connectable Conductors	4mm ² / 12 AWG	4mm ² / 12 AWG
13. Flame class	UL94-V0	UL94-V0
14. Body Dimensions	A: 130 x 130 x 43 mm B: 83 x 107 x 43 mm	Panel: Ø20.2 x 56 Assy.: Ø20.2 x 71 Adapter: 20.2 x 35.5 x 61
15. Certificate No.	R 50156073	R 50152733

Male Connector		Mating Parts of 1 ~ 6		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	1 LTWSPC-01RMFS-LC7001 FEATURES: - Male Connector - Rear Mounting 180° Solder or Crimp Type - IP 67 - TUV Certified		LTWSPC-01BFMA-LL7001 FEATURES: - Female Connector - Assembly Type - Without SR - IP 67 - TUV Certified	
	2 LTWSPC-01RFMS-LC7001 FEATURES: - Female Connector - Rear Mounting 180° Solder or Crimp Type - IP 67 - TUV Certified			
	3 LTWSBOX-SJA20-001 FEATURES: 6 Cord Box with Male and Female Connectors - Without Cable - TUV Certified		LTWSPC-01BMFA-LL7001 FEATURES: - Male Connector - Assembly Type - Without SR - IP 67 - TUV Certified	
	4 LTWSBOX-SJB20-001 FEATURES: 2 Cord Box with Male and Female Connectors - Without Cable - TUV Certified			
	5 LTWSBOX-SJA22-△XX FEATURES: 6 Cord Box with Cable Gland - Male and Female Connectors (please refer to mating parts) - Female Connector x 1 - Modling with Cable △ Means Different Cable Types (Upon Request) - TUV Certified		LTWSPC-01BMFA-LL7△XX FEATURES: - Female Connector with Cable - Assembly Type - Without SR - IP 67 △ Means Different Cable Types (Upon Request) - TUV Certified	
	6 LTWSBOX-SJB22-△XX FEATURES: 2 Cord Box with Cable Gland - Male and Female Connectors (please refer to mating parts) - Modling with Cable △ Means Different Cable Types (Upon Request) - TUV Certified		LTWSPC-01BFMA-LL7△XX FEATURES: - Female Connector with Cable - Assembly Type - Without SR - IP 67 - Cable Length 1 to 100 Meters △ Means Different Cable Types (Upon Request) - TUV Certified	

XXX - XX X X X X - X X X XXX

Specification

- TNC – TNC Connector
- RCA – RCA Connector

Numbe of Contacts

- 00 (RCA)
- 50 – 50Ω (BNC, TNC)
- 75 – 75Ω (BNC, TNC)

Style

- A – For Cable with S/R
- B – For Cable without S/R
- P – For Panel Front Mounting
- R – For Panel Rear Mounting

Connector Style

- M – Male Connector
- F – Female Connector

Contact Type

- M – Male
- F – Female
- C – Combo

Mating Style

- L – Lock
- S – Screw
- Q – Quick

Waterproof Rating

- 6 = IP 66
- 7 = IP 67
- 8 = IP 68

Back Shell

- L – Straight Mounting (180° For Cable Type)
- R – Right Angle Mounting (90° For Cable Type)
- C – Circular Straight (180° For Panel Type)

Version

- 000 : Phantom
- Without Cable 001, 002,.....
- For Cable A01 - 1M ~ A99 - 99M
 - A – UL 1185 26# (RCA)
 - B – RG58C / U (BNC, TNC)
 - C – RG59U (BNC, TNC)

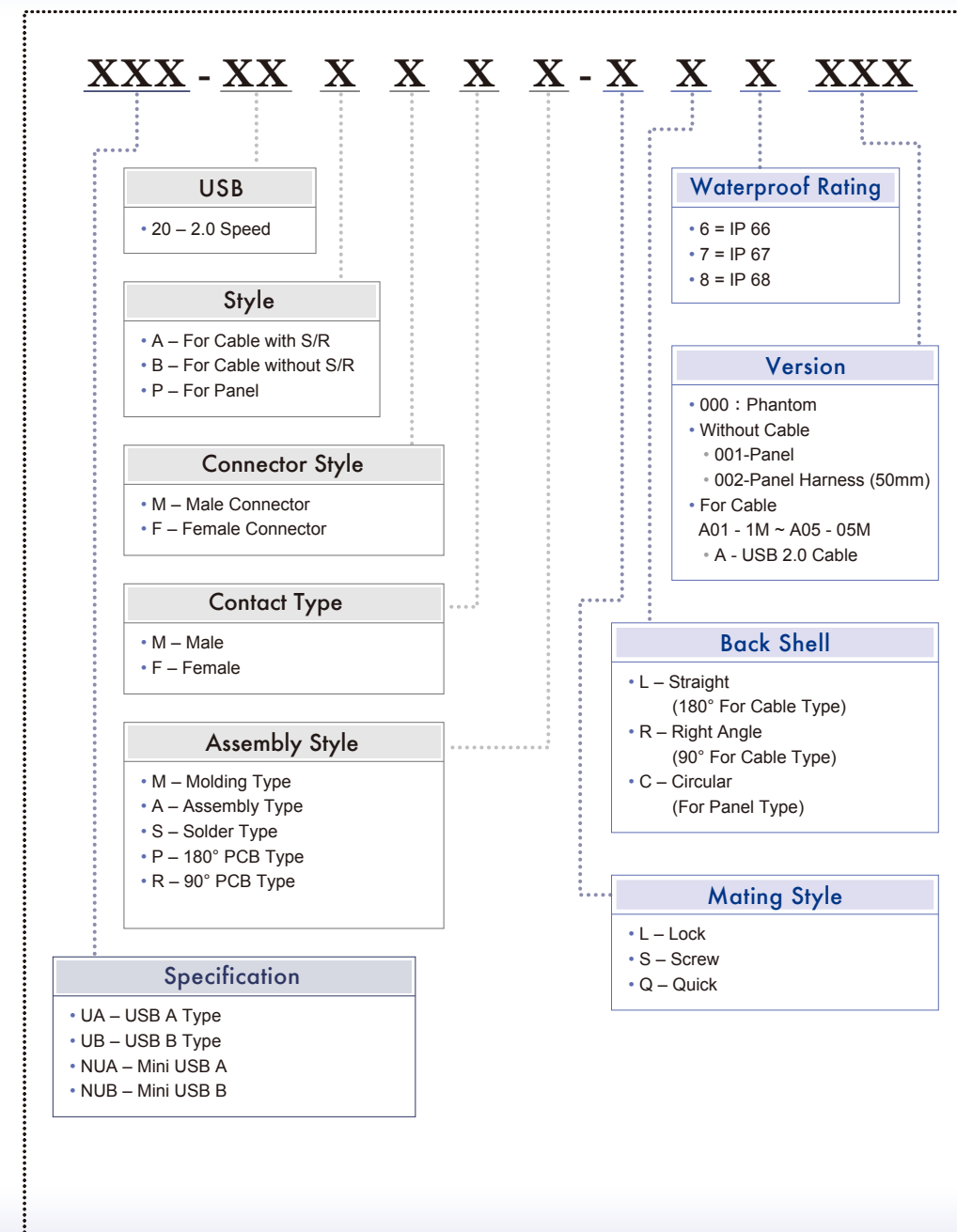
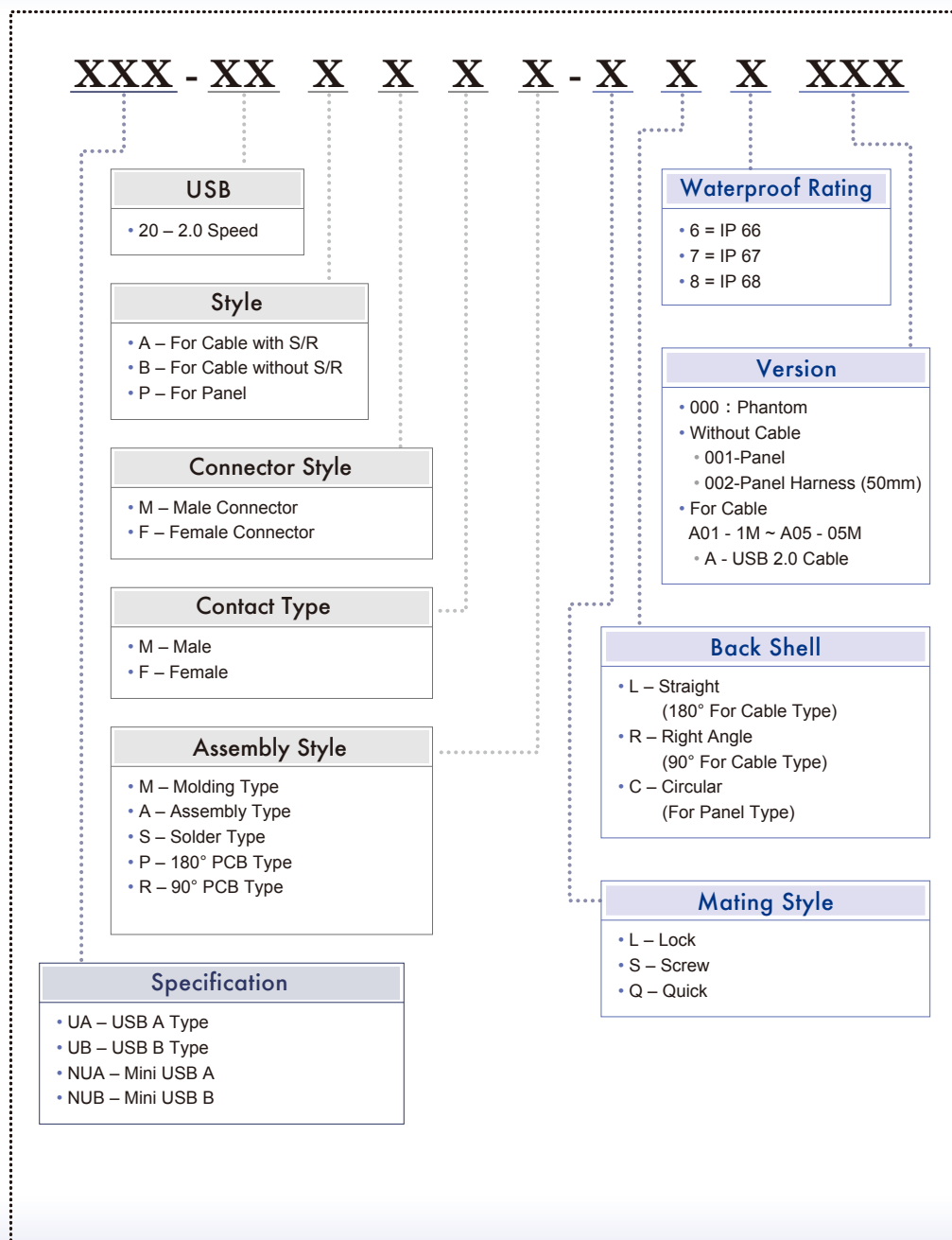
Assembly Style

- M – Molding Type
- A – Assembly Type
- S – Solder Type
- P – 180° PCB Type
- R – 90° PCB Type

SPECIFICATIONS

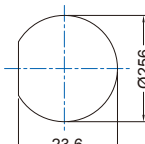
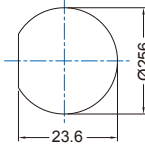
No.	Specifications	Standard Value
01. Identifications	TNC RCA	
02. Description	Panel Mount, Molded with Cable	
03. Impedance	TNC: 50Ω, 75Ω	
04. Material	Contacts: Copper Alloy, Nickel Plated / Gold Plated Connector Body: Teflon (TNC), PBT (RCA)	
05. Temperature Range	Cable: -20°C to +80°C Connector Body: -40°C to +105°C	
06. Waterproof Rating	IP66 and IP67	
07. Contact Resistance	≤30mΩ	
08. Insulation Resistance	TNC: ≥5000mΩ RCA: ≥100mΩ at DC 500V	
09. Breakdown Voltage	RCA: ≥AC 500V / 1 Minute	
10. Standard Cable Length (for Molded Cable)	1–99M (Standard Cable: RG58C / U or RG59U)	

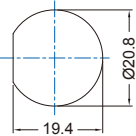
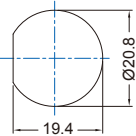
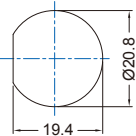
Male Connector		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	1 LTWTNC-△PMFS-SC△001 FEATURES: • TNC Connector • Screw Type • Front Mounting • Solder Contacts • IP 67 • △50Ω or 75Ω • △IP 67		LTWTNC-△AFMM-SL7XX FEATURES: • TNC Connector • Screw Type • In-line Molded Type • With SR • IP 67 • △50Ω or 75Ω	 Waterproof Cover with Chain
	2 LTWTNC-△PMFM-SL7XX FEATURES: • TNC Connector • Screw Type • Front Mounting • In-line Molded Type • With SR • IP 67 • △50Ω or 75Ω		• Only for 1 and 2	
	3 LTWRCA-00AMFM-QL6AX FEATURES: • RCA Connector • Quick Type • In-line Molded Type • With SR • IP 66		LTWRCA-00AFMM-QL6AXX FEATURES: • RCA Connector • Quick Type • In-line Molded Type • With SR • IP 66	
			• Only for 3	

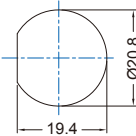
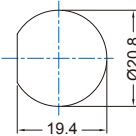
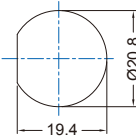


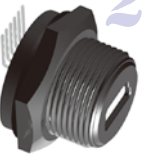
SPECIFICATIONS

No.	Specifications	Standard Value
01. Identifications	USB A Type USB B Type	
02. Description	Panel Mount, Molded with Cable and Field Installable	
03. Current Rating	USB: 1.5A Mini USB: 1A	
04. Speed	480Mbps	
05. Material	Contacts: Copper Alloy, Gold Plated Connector Body: PBT UL94V-0	
06. Temperature Range	-20°C to +80°C	
07. Waterproof Rating	IP67, IP68	
08. Contact Resistance	≤30mΩ Max	
09. Insulation Resistance	≥1000mΩ Min	
10. Breakdown Voltage	≥AC 500V / 1 Minute	
11. Standard Cable Length (for Molded Cable)	1–5M (Standard Cable: USB2.0)	

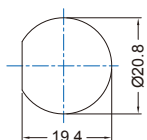
Male Connector		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 1 LTWUA-20PMFP-LC7△ FEATURES: • USB A Type • Male Connector • PCB 180° • With or without Flying Lead • IP 67 • △ Means Different Versions PANEL CUT-OUT 		 LTWUA-20AFMM-L△7AXX FEATURES: • USB A Type • Female Connector • Cable Length 1 to 5 Meters • IP 67 • △ 180° or 90° In-line Molded Type • With SR		 Waterproof Cover with Chain
 2 LTWUB-20PMFP-LC7△ FEATURES: • USB B Type • Male Connector • PCB 180° • With or without Flying Lead • IP 67 • △ Means Different Versions PANEL CUT-OUT 		 LTWUB-20AFMM-L△7AXX FEATURES: • USB B Type • Female Connector • Cable Length 1 to 5 Meters • IP 67 • △ 180° or 90° In-line Molded Type • With SR		 Waterproof Cover with Rubber Lead

Male Connector		Mating Parts 1~3		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 1 LTWUA-20PMFP-SC8△XX FEATURES: • USB A Type • Male Connector • PCB 180° • IP 68 • △ With or without Flying Lead PANEL CUT-OUT 				 Waterproof Cover with Chain
 2 LTWUA-20AMFM-SL7AXX FEATURES: • USB A Type • Male Connector • In-line Molded Type • With SR • Cable Length 1 to 5 Meters • IP 67 PANEL CUT-OUT 		 LTWUA-20BFMM-SL7AXX FEATURES: • USB A Type • Female Connector • In-line Molded Type • Without SR • Cable Length 1 to 5 Meters • IP 67		 Waterproof Cover with Rubber Lead
 3 LTWUA-20BMFA-SL8001 FEATURES: • USB A Type • Male Connector • Field Installable • Without Cable • IP 68 PANEL CUT-OUT 				 Waterproof Cover with Fish Line
				 Waterproof Box

Male Connector		Mating Parts 4~6		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
 4 LTWUB-20PMFP-SC8△XX FEATURES: • USB B Type • Male Connector • PCB 180° • IP 68 • △ With or without Flying Lead PANEL CUT-OUT 				 Waterproof Cover with Chain
 5 LTWUB-20AMFM-SL7AXX FEATURES: • USB B Type • Male Connector • In-line Molded Type • With SR • Cable Length 1 to 5 Meters • IP 67 PANEL CUT-OUT 		 LTWUB-20BFMM-SL7AXX FEATURES: • USB B Type • Female Connector • In-line Molded Type • Without SR • Cable Length 1 to 5 Meters • IP 67		 Waterproof Cover with Rubber Lead
 6 LTWUB-20BMFA-SL8001 FEATURES: • USB B Type • Male Connector • Field Installable • Without Cable • IP 68 PANEL CUT-OUT 				 Waterproof Cover with Fish Line
				 Waterproof Box

Male Connector		Mating Parts 1 ~ 4		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
	LTWNUB-20PMFP-SC7001 FEATURES: • Male Connector • PCB 180° • IP 67			 Waterproof Cover with Chain
	LTWNUB-20PMFR-SC7001 FEATURES: • Male Connector • PCB 90° • IP 67			
	TWNUB-20BMFA-SL7001 FEATURES: • Male Connector • Field Installable • Without SR • IP 67		LTWNUB-20AFMM-SL7AXX FEATURES: • Female Connector • In-line Molded Type (Cable to Cable) with SR • Cable Length 5 Meters Max • IP 67	 Waterproof Cover with Rubber Lead
	LTWNUB-20AMFM-SL7AXX FEATURES: • Male Connector • In-line Molded Type (Cable to Cable) with SR • Cable Length 5 Meters Max • IP 67			 Waterproof Cover

PANEL CUT-OUT



XXX - XX X X X X - X X X XXX

Number of Contacts

- 02, 03, Pin

Style

- A – For Cable with S/R
- B – For Cable without S/R
- P – For Panel Front Mounting
- R – For Panel Rear Mounting

Specification

- ZB - Ø18 Size Current Rating 10A

Connector Style

- M – Male Connector
- F – Female Connector

Contact Type

- M – Male
- F – Female
- C – Combo

Assembly Style

- M – Molding Type
- A – Assembly Type
- S – Solder Type
- P – 180° PCB Type
- R – 90° PCB Type
- B – Screw in Type

Mating Style

- L – Lock
- S – Screw
- Q – Quick

Back Shell

- L – Straight (180° for Cable Type)
- R – Right Angle (90° for Cable Type)
- C – Circular (For Panel Type)
- S – Square (For Panel Type)

Waterproof Rating

- 6 = IP 66
- 7 = IP 67
- 8 = IP 68

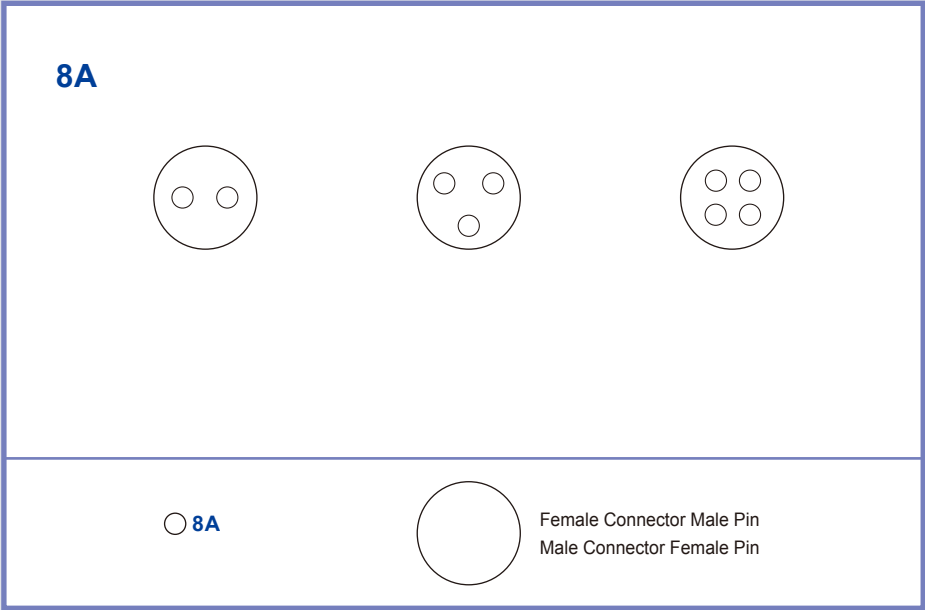
Version

- 000 : Phantom
- Without Cable 001, 002,.....
- For Cable A01 - 1M ~ A99 - 99M
 - A – 18AWG Cable

SPECIFICATIONS

No.	Specifications	Standard Value
01. Identifications		Ø18mm Size
02. Description		Panel Mount, Molded with Cable
03. Current Rating / Pin Arrangements		8A: 2 to 4
04. Material		Contacts: Copper Alloy Connector Body: PVC
05. Temperature Range		Connector: -20°C to +80°C
06. Waterproof Rating		IP67
07. Insulation Resistance		≥100MΩ at DC 500V
08. Breakdown Voltage		>AC1.5KV / 1Minute
09. Standard Cable Length (for Molded Cable)		1, 2, 5, 10M

CONTACT PIN ARRANGEMENTS



149 KSZ Circular Connector Panel (8A)

Male & Female Connector		Mating Parts		Accessories
CONNECTOR	P/N	CONNECTOR	P/N	
Female Cable 	KSZZB-△AFMM-LL7AXX FEATURES: • Lock Type, Crimp Contacts • 180° In-line Molded Type • IP 67 • △ 8A: 02, 03, 04		KSZZB-△AMFM-LL7AXX FEATURES: • Lock Type • 180 In-line Molded Type • With SR • PVC Cable • IP 67 • △ 8A: 02, 03, 04	
			KSZZB-△RMFM-LC7001 FEATURES: • Lock Type • Rear Mounted with Wire harness • IP 67 • △ 8A: 02, 03, 04	
Male Cable 	KSZZB-△AMFM-LL7AXX FEATURES: • Lock Type, Crimp Contacts • 180° In-line Molded Type • IP 67 • △ 8A: 02, 03, 04		KSZZB-△AFMM-LL7AXX FEATURES: • Lock Type • 180 In-line Molded Type • With SR • PVC Cable • IP 67 • △ 8A: 02, 03, 04	
Male panel 	KSZZB-△RMFM-LC7001 FEATURES: • Lock Type, Crimp Contacts • Rear Mounted with Wire harness • IP 67 • △ 8A: 02, 03, 04			

PANEL CUT-OUT

