- Alternative solution to M12
- Spring loaded push lock design
- Protection up to IP68
- Power AC/DC, data, signal, hybrid
- Saving on-site installation time & costs
- UL1977 & 2238+50e
- Eliminating workmanship errors

Amphenol LTW

X-Lok Connector

Blind mating with audible and tactile feedback

Mini Size

Up to 33 pins
Alternative solution to M12

Standard Size

2 ~ 8 pins
Up to 10A

Middle Size

2 ~ 12 pins
Up to 20A

Large Size

2 ~ 100* pins
Up to 50A

Accessory

Waterproof cap, Adaptor, Contacts & Crimp Tool...

Unrivaled InterConnects for Harsh Environments

About ALTW

3
Production Sites
(Taiwan, China, Mexico)

30+
Market Applications

90,000+
Products

Since 1993, Amphenol LTW Technology “ALTW” lives and breathes to create, innovate, design and produce “***unrivaled interconnects for harsh environments***”. With over 300 worldwide patents, not only does ALTW offer the broadest and widest range of rugged interconnects in the industry but also customization with the mission of “Customer Satisfaction First”. Undoubtedly, ALTW is the leader in rugged interconnects, highly recognized for its uncompromising quality, short lead time, fast and tailored service and its very competitive pricing.

Regardless of the challenging environments that your products will be subject to; there is a very good chance that you will find what you are looking for with ALTW.

Amphenol LTW

X-Lok Push Lock Connector

Amphenol LTW's X-Lok Push Lock connector offers secure, efficient and cost effective connectivity. Now unveiling the metal design, the robust construction and intuitive push lock mechanism can ensure reliable connections in the very roughest conditions. It is suitable for applications that requires extreme environmental resistance.

The X-Lok Series enable quicker installation than traditional threaded solutions. With UL1977 & 2238+50e certification, ALTW's X-Lok is your ideal solution for harsh environment and outdoor applications.

- IP68 mated or unmated
- Support high speed data transmission (Cat. 6A)
- Saving on-site installation time & costs
- Exponentially increase installation outputs
- Power, data / signal, hybrid
- Blind mating with audible and tactile feedback

Unrivaled InterConnects for Harsh Environments

Product Range Overview

SUB SERIES	Mini A Size / Mini A Size LED	Standard B Size	Middle C Size	Large D Size
Mating Style	Push Lock	Push Lock	Push Lock	Push Lock
Plastic Version	✓	✓	✓	✓
Metal Version	✓	-	-	✓
No. of Contacts	2 ~ 33	2 ~ 8	2 ~ 12	2 ~ 100*
Transmission Rate	Cat. 5e, Cat. 6A	-	-	✓
Plating of Contacts	Gold Plating	Gold Plating	Gold Plating, Sliver Plating	Gold Plating, Sliver Plating
Operating Voltage (AC/DC)	30 ~ 630V	300 ~ 600V	300 ~ 600V	60V (0.5A), 300 ~ 600V
Nominal Current	0.5A ~ 16A	5A ~ 10A, 10A+5A	5A ~ 20A, 10A+5A	0.5A ~ 50A, 20A+5A, 50A+5A
Operating Temperature	Receptacle & Receptacle With Wires: -40˚C ~ 105˚C Overmolded With Cable: (1) Data Group: -20˚C ~ 80˚C (2) Power Group: -20˚C ~ 105˚C (3) Hybrid Group: -40˚C ~ 105˚C Field Serviceable/Installable: -40˚C ~ 105˚C			
Fasten Style of Nut	Front	Front, Rear	Front, Rear	Front, Rear
Receptacle	✓	✓	✓	✓
Receptacle with Cable	✓	✓	✓	-
Field Serviceable/Installable	✓	✓	✓	✓
Overmolded with Cable	✓	✓	✓	✓
Accessories	✓	✓	✓	✓
Mating Cycles (Pin Contact)	1000	1000	1000	1000
IP Rating	IP68	IP68	IP68	IP68
Salt Spray (Connector, Mated)	500h	500h	500h	500h
UV Resistant	✓	✓	✓	✓
Flammability Rating	UL94V-0	UL94V-0	UL94V-0	UL94V-0
Vibration Resistant	Frequency Range 10 ~ 55Hz / Amplitude 1.52mm			
EMI Option	✓	-	-	✓
ROSH Compliant	✓	✓	✓	✓
REACH Compliant	✓	✓	✓	✓
Certifications	CSA, UL1877, UL2238, UL50e, TUV			
Applicable Wire Gauge	32 ~ 14AWG	26 ~ 16AWG	26 ~ 12AWG	32 ~ 12AWG

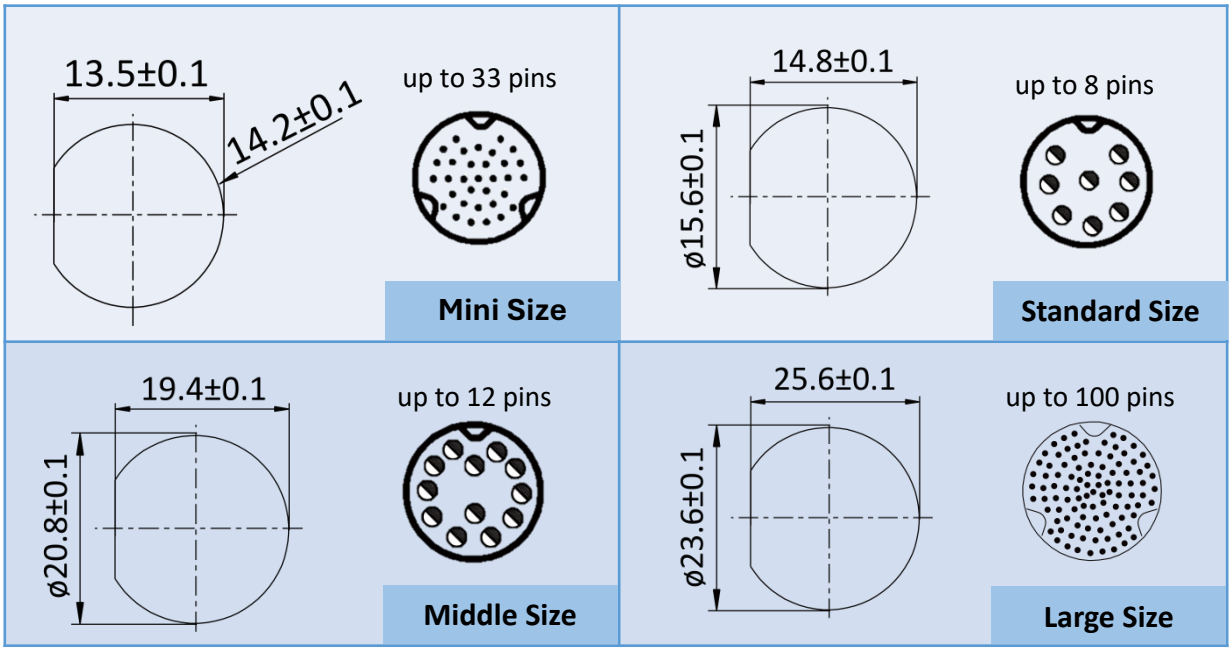
Amphenol LTW

Served Markets & Applications

Market	Application	
LED Lighting	• Architectural Lighting • Residential, Medical, and Commercial Lighting • Street, Parking, Park, and Tunnel Lighting • Entertainment and Signage Lighting	• Horticulture, Grow, & Warehouse Lighting • Mass Transportation and Vehicles • Marine Vessel and Submersible Lighting • Appliances and Equipment Lighting
Marine	• Navigation System: Radar, GPS, Sonar, Fish-finder, Auto-pilot, Sailing Instruments, Chartplotter • Communication: Antenna, radio, AIS, SCS • Instrumentation & Monitoring: MFD, CCTV, Sensors	• Power Distribution: Appliances, Charging, HVAC • Entertainment: Video, Audio, Decorative • Motors: Outboard, Inboard, Pump, Actuator, Trolling • Subsea: Exploration, Buoys, Underwater Vehicle
Broadband Wireless Access	• Access Point: LTE, 5G • Cellular and Mobile Station • Wireless Router and Mobile Backhaul	• Power Supply and distribution system • Other Communication Equipment
Industrial Automation	• Data Communication: Router, Switches • Motors: Servo, Step, Encoder, Actuator • Power Supply and Distribution • Robotic Arms, Packaging, and Conveyor system	• Controller: Machine Vision, AVI, Sensors • Autonomous Robots, Forklifts, Power Tools • Industrial PC, Counters, and Display
Renewable Energy	• Photo Voltaic (PV), Concentrated Solar Power (CSP) • Power Distribution and Control: Inverter, MLPE, ICS • Device Communication and Tracker	• Wind Turbine and Tidal Power Generation • Energy Storage and Portable Energy
Heavy Equipment	• Navigation System: GPS, Lidar, Radar, Ultrasonic • Instrumentation, Control, and Diagnostic Systems • Monitoring: Display, Camera, Imaging	• Safety System: Sensor, ADAS, Telematics & Tracking • Communication and Electronic Toll systems • Power Distribution: Charging, Lighting, Equipment
Autometer	• Metering: Water, Electric, & Gas Meter • Power and Control: Drone, Security Alarm	• Monitoring: Sewage, Telemetry, and Vehicle tracking
Test Equipment	• Measuring Device: Air, Humidity, Light, sound, Water, Image, Weight, Height • Detectors: Gas, Fire, Leak, Motion, Heat	• Monitoring: Seismic (earthquake), Climatic • Weighing: Weigh, in-motion • Geodetic System: Surveying, Laser marking, Borrescope
Hybrid Electric Vehicles	• Motor Module: Scooter, Hoover board, Wheelchair • Safety System: Speed, Brake, Throttle, Gear • Power System: Controller	• Sensors: Speedometer, Fuel, Cleaning • Device Communication: CAN, In-vehicle Info • Lighting: Interior and Exterior LED
Railway Mass Transit	• Navigation: GPS, Radar, Lidar, Ultrasonic • HVAC • Infotainment: Display, sound, Broadcasting, monitor	• Sensors: Speedometer, Fuel, Cleaning • Communication: Main Controller, In-vehicle Info • Lighting: Interior and Exterior
Mobile Devices	• Drone Remote Controller • Measurement: Altimeter, Gesture, Piezoelectric	• Handheld: Barcode, Scanner, Portable lamp, GPS
Transportation	• Monitoring: Display ,C CTV, Lidar, Surveillance Cam • Communication: Wifi, router, Fleet Management • Navigation: GPS, Radar	• Power: Charger, Outlet, Inlet • Peripherals: Speaker, Electronic seats, Winches
Medical Equipment	• Patient Care: Electric Beds, Wheelchair Lift & stair, Rehabilitation, System, Mobile Carts • Visualization: Display and monitors	• Diagnostic: MRI, CT Scan, Ultrasound, X-ray • Monitoring: ECG, Holter, Blood Pressure, Sugar
Automotive Diagnostics	• Auto-crash detection & notification system • Vehicle Tracking and Roadside Assistance System	• Remote Diagnostics
UAV	• Drone: Commercial, Consumer, & Military	
Lifts & Materials Handling	• Forklift, Industrial Lift, Material Handling	
Remote Video Response Center	• Monitoring: Display ,CCTV, Dome, IP Camera • Detection: Auto-License Plate Recognition, Alarm • Identification: Face detection, encoders	• Remote Control Devices and Sensors • Peripherals: Junction boxes and cabling system • Lighting: Interior and Exterior
Autonomous	• Navigation & Sensor: GPS, Lidar, Radar, Ultrasonic, IMU • Imaging: Cameras, Monitors, Infotainment Display	• Controller: Inertial Measurement Unit & Navigation System, Central Computer
Communication	• Transmitter and Receiver Equipment • Data: Router and Switches • Base Station and Access Point	• Audio: VoIP, Telephone • High Bandwidth: Multiplexer & demultiplexer
Rugged IT	• Telemetry • Military Notebook & Tablet and VR & AR	

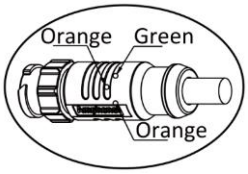
Panel Cut-Out

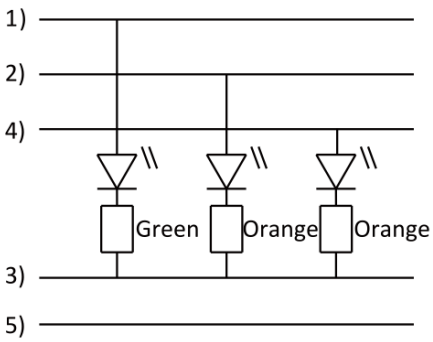
(unit: mm)



X-Lok Mini Size with LED Indicator

- Suitable for factory automation & EN61373 / SAE J2839 shock & vibration approved
- With LED indicator colors: Green / Orange / Orange
- Starts from 3 / 4 / 5 pins
- Temperature -40˚C ~ 105˚C
- Long service life ≥ 1,000 cycles
- Protection class IP68
- Corrosion resistance up to 500h
- Right angle / straight available





Part Number:

Female Connector, Female Contact

Male Connector, Male Contact

NEW RELEASE

Amphenol LTW

Ultra High Density

Alternative Solution to M12

Amphenol LTW's 33-pin Ultra High-Density (UHD) X-Lok Mini Size push lock connector boasts compact design and high contact density, providing space efficiency and enhanced data transmission. Ideal for the newest automation systems, sensor arrangements, industrial cameras, medical equipment as well as measurement and control technology. It offers a versatile and cost-effective solution for various industries, ensuring optimal performance in constrained spaces.

- ✓ Up To 33 Contacts
- ✓ Metal, Shielded
- ✓ High-performance
- ✓ Blind Mate
- ✓ Audible Feedback
- ✓ Push-Lock Quick Mating

Features and Specification:

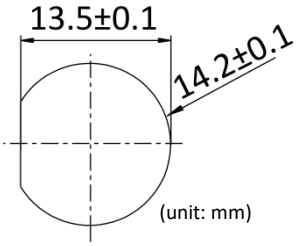
Current Rating	0.5A
Voltage Rating	30V
Temperature Range	-40 °C ~ 105°C
Waterproof Rating	IP68 (1M/24Hrs)
Durability	1000 Cycles
Salt Spray	48 Hours
Mating Style	Push Lock

Part Number:

Receptacle:
ASY-33PMMP-QC8001

Overmolded:
ASY-33BFFM-QL8C01

Panel Cut-Out:



Circular Flange (D Cut)

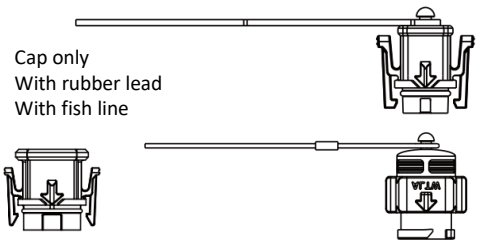
Unrivaled InterConnects for Harsh Environments

Accessory

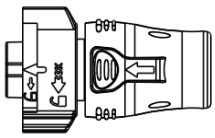
(click the image to find more product information)

Waterproof Cap

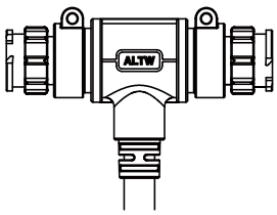
- ✓ Cap only
- ✓ With rubber lead
- ✓ With fish line



Terminator

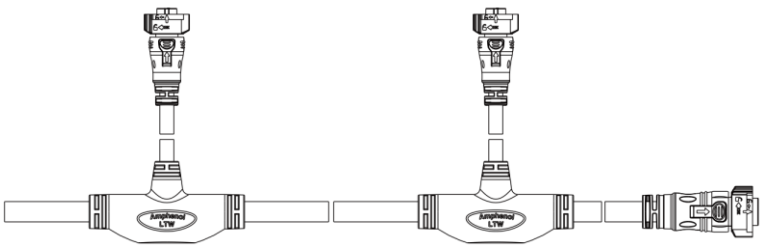


T Cable

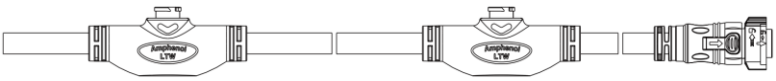


X-Tee (cable to cable)

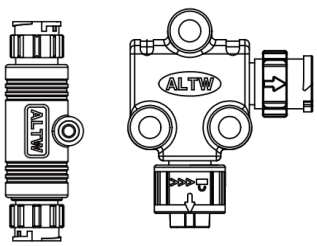
Trunk Cable with Cable



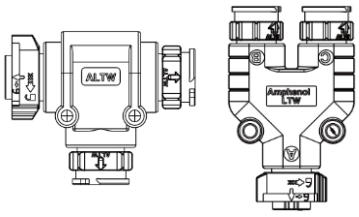
Trunk Cable with Panel



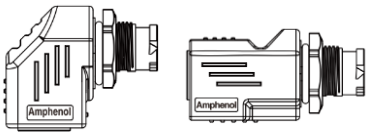
I & L Adaptor



T & Y Adaptor

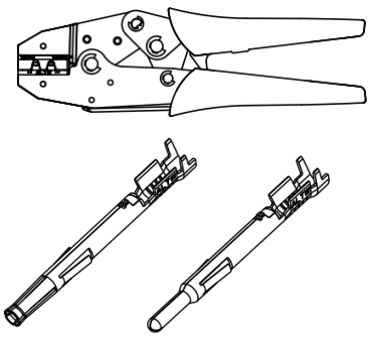


X-Lok to RJ Adaptor

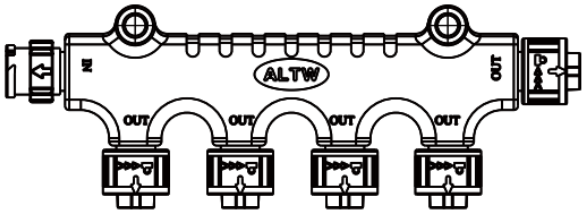


Right Angle Straight

Crimp Tool / Contacts



Multi-Ports Adaptor



Amphenol LTW

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