

AMPHENOL INDUSTRIAL PRODUCTS GROUP MARINE MARKET PRESENTATION AND CAPABILITIES

AMPHENOL CORPORATION

- OVER 80 YEAR HISTORY, LISTED ON NYSE SINCE 1991
- SECOND LARGEST INTERCONNECT MANUFACTURER IN THE WORLD



- HIGH TECHNOLOGY INTERCONNECT SOLUTIONS
- LEADING POSITIONS IN DIVERSE MARKETS

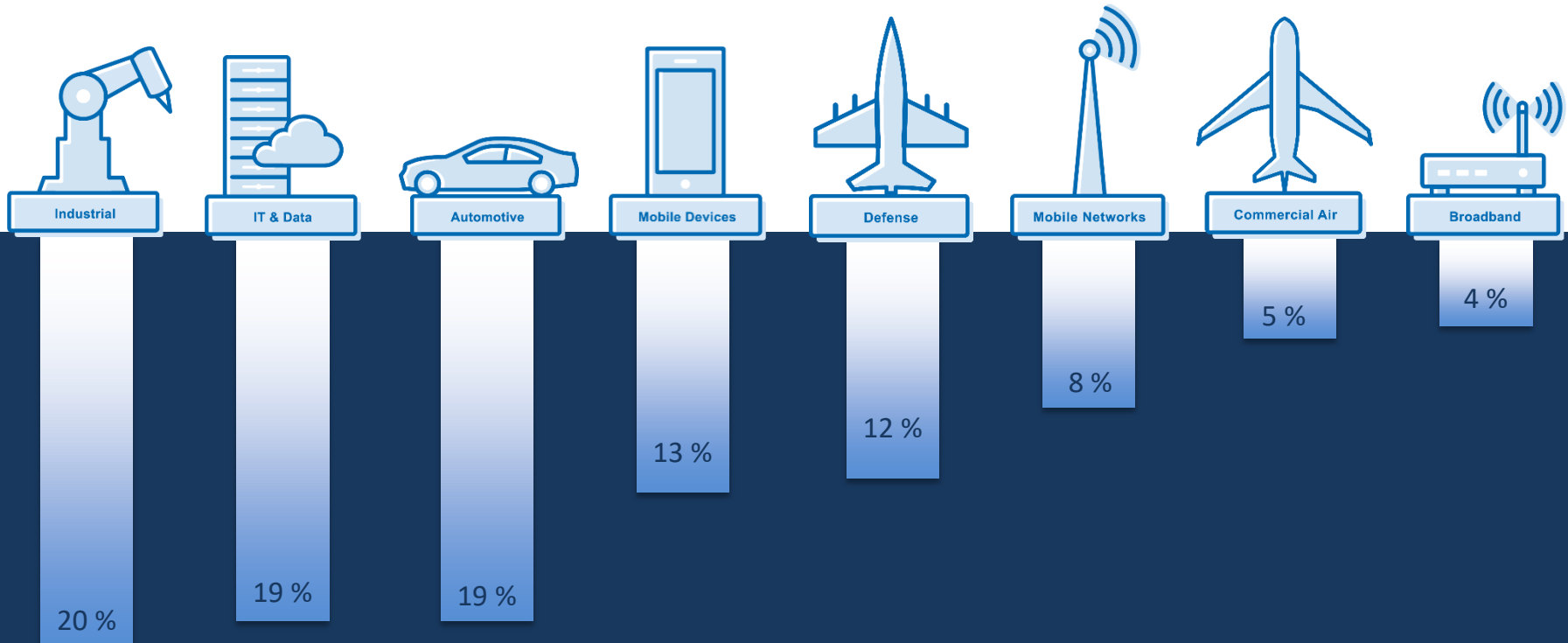


- BROAD GLOBAL PRESENCE AND CAPABILITY
- OVER 74,000 EMPLOYEES WORLDWIDE
- TOTAL NET SALES 2019: US \$ 8.225 BILLION



GLOBAL LEADER IN THE MARKET

% SALES BY MARKET

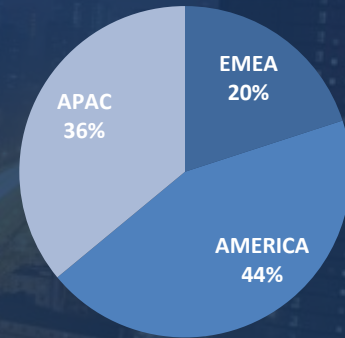


GLOBAL PRESENCE IN THE MARKET

% SALES BY MARKET



% SALES BY REGION



Operations

Australia	France (8)	Italy (2)	Morocco	Taiwan (5)
Brazil (3)	Germany (8)	Japan (5)	Poland (1)	Tunisia (3)
Canada (7)	HQ USA (44)	Korea (5)	Puerto Rico	United Kingdom (4)
China (38)	India (7)	Macedonia	Singapore (4)	
Czech Republic (2)	Indonesia	Malaysia (4)	Slovakia (2)	
Estonia (3)	Israel	Mexico (6)	Switzerland (1)	

Sales Location

Argentina (2)	Netherlands (2)
Austria	Russia
Dubai	Spain
Finland	South Africa
Germany	Sweden (2)
Hong Kong	Turkey
Ireland	Vietnam



74,000 Employees

HIGH PERFORMANCE STRATEGY

COMPLEMENTARY AQUISITIONS
WITH NEW TECHNOLOGY, STRONG MANAGEMENT
AND MARKET PENETRATION

TECHNOLOGY

DIVERSITY

GLOBAL

LOW COST

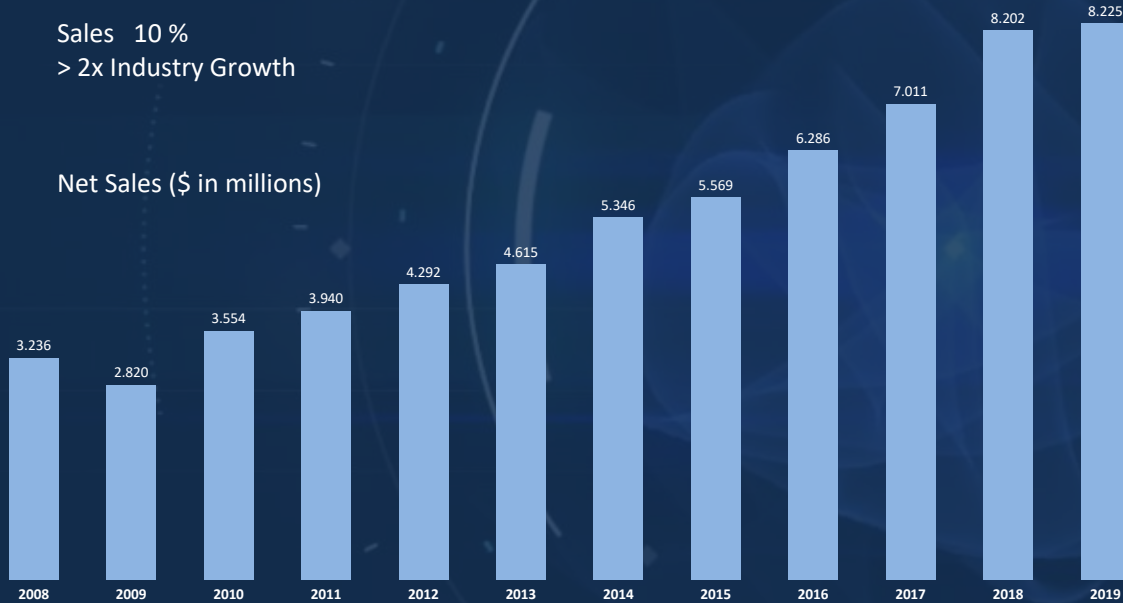
ENTREPRENEURIAL ORGANIZATION WITH SEPARATE P&L'S
HEADED BY STRONG LEADERS AND QUICK DECISION MAKERS

EXCELLENT RECORD OF ACHIEVEMENTS

AMPHENOL 10 Year CAGR

Sales 10 %
> 2x Industry Growth

Net Sales (\$ in millions)



- INDUSTRY LEADING GROWTH FOR OVER A DECADE
- INDUSTRY LEADING OPERATING PROFIT MARGINS IN ALL BUSINESS CYCLES
- STRONG CASH FLOW GENERATION
- SUCCESSFUL ACQUISITION PROGRAM IN CONSOLIDATING INDUSTRY

CUSTOMERS IN STRATEGIC MARKETS





AMPHENOL INDUSTRIAL PRODUCTS GROUP

- 22 OPERATIONS GLOBALLY IN EMEA, AMERICA AND APAC
- LEADING POSITIONS IN DIVERSE INDUSTRIAL SUB MARKETS
- TOTAL NET SALES INDUSTRIAL MARKET 2019: US \$ 1.645 BILLION

AMPHENOL INDUSTRIAL MANUFACTURING OPERATIONS



Amphenol Bernd Richter
Wipperfurth, Germany



Amphenol Industrial Operations
Nogales, Mexico



Amphenol EEC
Chicago-IL, USA



Amphenol Sincere
Guangzhou, China



Amphenol Technology SZ
Shenzhen, China



Amphenol TPI
Winnipeg, Canada



Amphenol Alden
Brockton-MA, USA



Amphenol Oil&Gas Technologies
Houston-TX, USA



Amphenol PCD
Shenzhen, China



Amphenol Anytek
Shenzhen, China



Amphenol Tuchel Industrial
Heilbronn, Germany/Ostrov, CZ



Amphenol Sine
Clinton Township-MI, USA



Amphenol DC Electronics
San Jose-CA, USA



Amphenol Goldstar
Baicheng / Yulin, China



Amphenol Technology Zh
Zuhai, China



Amphenol NeLson Dunn
Cerritos-CA, USA



Amphenol Middle East
UnitedArab Emirates



Amphenol Australia
Carrum Downs,Australia



Amphenol Daeshin
Bucheon-City, South Korea



Amphenol LTW
Taipei, TW/ Kunshan, China



Cable Assemblies Connectors Testing Flex Circuits

AMPHENOL INDUSTRIAL VERTICAL FOCUS MARKETS

HEAVY
EQUIPMENT



RENEWABLE
ENERGY



AUTOMATION &
ROBOTICS



HYBRID &
ELECTRIC VEHICLES



MARINE



TEST, MEASUREMENT &
INSTRUMENTATION



LIGHTING &
ENTERTAINMENT



OIL & GAS



MEDICAL



RAIL MASS
TRANSIT



VERTICAL MARKET
MARINE

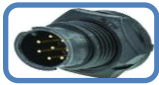
- Waterproof IP68 & IP66
- NMEA 2000 standard interfaces
- Cables size from 0,25mm² to 400mm²
- Signal & hybrid arrangements
- Radar/GPS/Display interconnect
- Lighting Plug&Play options



AMPHENOL INDUSTRIAL SOLUTION FOR MARINE



NMEA 2000



CERES



X|LOK



HS|LOK



FICX|JOINERS



M8 & M12



RBL



IPCS



VENT



RJ45 IP68



D|SUB IP68



USB IP68



A SERIES



DURA|MATE AHDP



AT PANEL



AMPHE|LITE



ECO|MATE



SUR|LOK PLUS



FO IP68



MIL-DTL-38999 ACME THREADED: AMPHE|LITE SERIES

Amphenol Industrial Operation (AIO-ATZ)

APPROVAL UL	YES
COMPATIBLE/COMPETITOR SERIES	38999
CONTACT TYPE	SOLID
CONTACT WIRE GAUGE	AWG12-22/,25-2,5MM ²
EMI OPTION	YES
HARDWARE COUPLING MECHANISM	ACME THREADED
HARDWARE NR INSERT ARRANGEMENTS	39
IP RATING MATED	IP67
MATERIAL SHELL	PLASTIC OR METAL
MATING CYCLES	500
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	41
OPERATING TEMPERATURE	-55C TO +125C



PLASTIC CIRCULAR: X|LOK

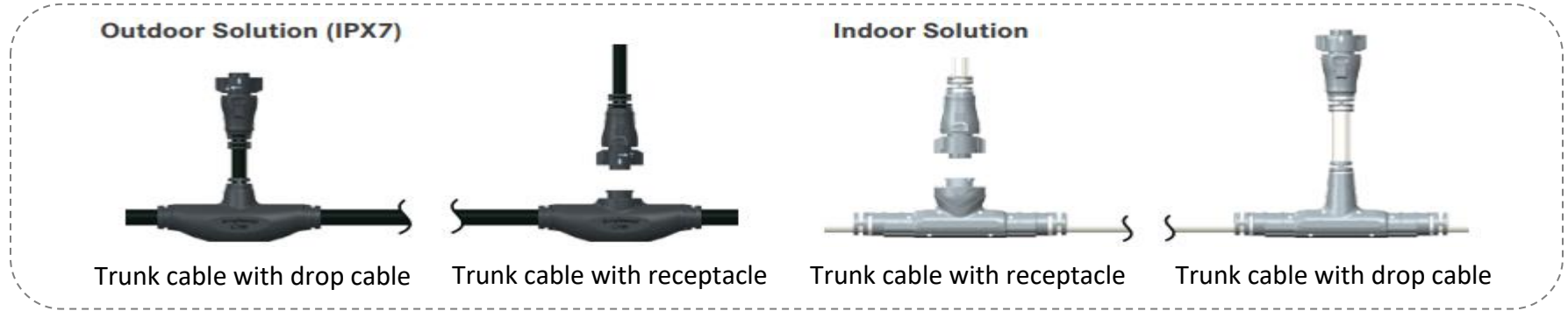
Amphenol LTW Technology Co. (LTW)

APPROVAL UL	YES
COMPATIBLE/COMPETITOR SERIES	
CONTACT TYPE	S&F
CONTACT WIRE GAUGE	AWG16-22/,25-1,5MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	REVERSE BAYONET
HARDWARE NR INSERT ARRANGEMENTS	88
IP RATING MATED	IP68
MATERIAL SHELL	PLASTIC
MATING CYCLES	1.000
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	20A
OPERATING TEMPERATURE	-40C TO +105C



IPCS

Amphenol LTW Technology Co. (LTW)



PLASTIC CIRCULAR: HS|LOK

Amphenol LTW Technology Co. (LTW)

CONTACT SIZE	5A, 10A
CONTACT TYPE	SOLID
CONTACT WIRE GAUGE	AWG20-24/,25-0,5MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	PUSH LOCK
HARDWARE HOUSING TYPE	CIRCULAR
HARDWARE NR INSERT ARRANGEMENTS	6
IP RATING MATED	IP68
MATERIAL SHELL	PLASTIC
MATING CYCLES	2.000
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	5A
OPERATING TEMPERATURE	-40C TO +105C



Catalog



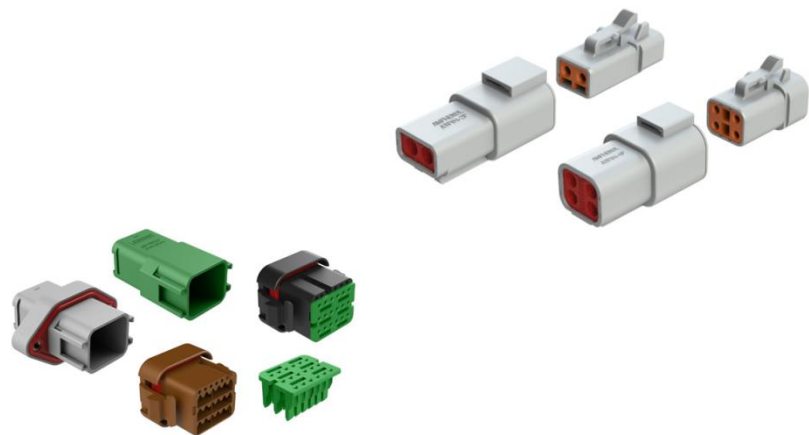
Presentation



AT & ATP & ATV SERIES

Amphenol Sine Systems Corporation (SINE)

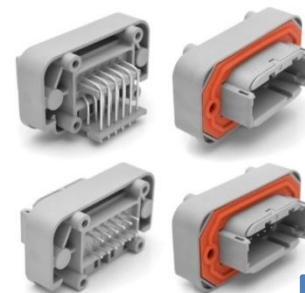
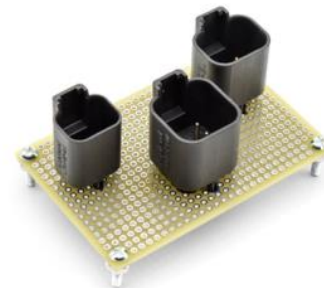
APPROVAL UL	YES
COMPATIBLE/COMPETITOR SERIES	DT-DTM-DTP
CONTACT TYPE	SOLID & S&F
CONTACT WIRE GAUGE	AWG12-20/0,5-2,5MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	PUSH-PULL
HARDWARE NR INSERT ARRANGEMENTS	2,3,4,6,8,12,13,18
IP RATING MATED	IP67
MATERIAL SHELL	PLASTIC
MATING CYCLES	100
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	25A
OPERATING TEMPERATURE	-40°C TO +125°C



AT SERIES PANEL | MATE & BOARD | LOK

Amphenol Sine Systems Corporation (SINE)

APPROVAL UL	NA	NA
COMPATIBLE/COMPETITOR SERIES	DT	DT
CONTACT TYPE	CRIMP, PCB	PCB
CONTACT WIRE GAUGE	AWG12-18/,75-2,5MM ²	AWG16-18/,75-1,5MM ²
EMI OPTION	NO	NO
HARDWARE COUPLING MECHANISM	PUSH-PULL	PUSH-PULL
HARDWARE NR INSERT ARRANGEMENTS	2,3,4,6,8,12	2,3,4,6,8,12,13
IP RATING MATED	IP67	IP67
MATERIAL SHELL	PLASTIC	PLASTIC
MATING CYCLES	100	100
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	25A	13A
OPERATING TEMPERATURE	-40°C TO +125°C	-40°C TO +125°C



Catalog



Presentation



DURA|MATE® AHDP

Amphenol Sine Systems Corporation (SINE)

APPROVAL UL	NO
COMPATIBLE/COMPETITOR SERIES	HDP20
CONTACT TYPE	SOLID & S&F
CONTACT WIRE GAUGE	AWG4-22/,5-16MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	BAYONET
HARDWARE NR INSERT ARRANGEMENTS	16
IP RATING MATED	IP67 / IP69K
MATERIAL SHELL	PLASTIC
MATING CYCLES	100
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	135A
OPERATING TEMPERATURE	-55C TO +125C



Catalog



Presentation



ECO|MATE®

Amphenol Tuchel Electronics Industrial (ATEI)

APPROVAL UL	YES
COMPATIBLE/COMPETITOR SERIES	
CONTACT TYPE	SOLID & S&F
CONTACT WIRE GAUGE	AWG12-18/,75-2,5MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	THREADED
HARDWARE NR INSERT ARRANGEMENTS	2
IP RATING MATED	IP67
MATERIAL SHELL	PLASTIC
MATING CYCLES	500
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	40A
OPERATING TEMPERATURE	-40°C TO +125°C



Catalog



Presentation



PLASTIC CIRCULAR - RBL

Amphenol LTW Technology Co. (LTW)

APPROVAL UL	YES
CONTACT TYPE	S&F
CONTACT WIRE GAUGE	AWG12-24/0,25-4MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	PUSH-LOCK
HARDWARE HOUSING TYPE	CIRCULAR
HARDWARE NR INSERT ARRANGEMENTS	35
IP RATING MATED	IP67
MATERIAL SHELL	PLASTIC
MATING CYCLES	250
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	20A
OPERATING TEMPERATURE	-40C TO +105C



Catalog



Presentation



CERES – CIRCULAR WATERPROOF

Amphenol LTW Technology Co. (LTW)

APPROVAL UL	YES
CONTACT TYPE	SOLID & S&F
CONTACT WIRE GAUGE	AWG14-26/0,14-2,5MM ²
EMI OPTION	YES
HARDWARE COUPLING MECHANISM	BAYONET & THREADED
HARDWARE HOUSING TYPE	CIRCULAR
HARDWARE NR INSERT ARRANGEMENTS	78
IP RATING MATED	P67
MATERIAL SHELL	PLASTIC
MATING CYCLES	2.000
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	20A
OPERATING TEMPERATURE	-40C TO +105C



Catalog



Presentation



FICX - CABLE JOINERS

Amphenol LTW Technology Co. (LTW)



SUR|LOK PLUS®

Amphenol Industrial Operation (AIO-ATZ)

1 CONTACT HOUSING	YES
CONTACT (RADSOK®) SIZE	5,7-10,3MM
CONTACT WIRE SIZE	16-95MM ²
HARDWARE IP2X ON RECEPTACLE SIDE	YES
HARDWARE IP67 IN MATED CONDITION	YES
HARDWARE WITH CPA	NO
HARDWARE WITH EMI OPTION	NO
HARDWARE WITH RIGHT ANGLE CABLE EXIT	YES
HARDWARE WITH STRAIGHT CABLE EXIT	NO
OPERATING CURRENT AT 80C	120-300A
OPERATING VOLTAGE	1000V
TERMINATION PLUG	CRIMP



Catalog

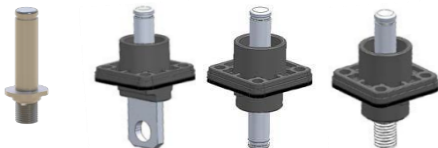


Presentation

RAD|LOK™

Amphenol Guangzhou Electronics Co. Ltd. (GEC)

1 CONTACT HOUSING	YES
CONTACT (RADSOK®) SIZE	3,6-14MM
CONTACT WIRE SIZE	10-150MM ²
HARDWARE IP2X ON RECEPTACLE SIDE	NO
HARDWARE IP67 IN MATED CONDITION	NO
HARDWARE WITH CPA	NO
HARDWARE WITH EMI OPTION	NO
HARDWARE WITH RIGHT ANGLE CABLE EXIT	YES
HARDWARE WITH STRAIGHT CABLE EXIT	NO
OPERATING CURRENT AT 80C	80-500A
OPERATING VOLTAGE	1000V
TERMINATION PLUG	CRIMP



Catalog



Presentation



VENT

Amphenol LTW Technology Co. (LTW)



D-SUB WATERPROOF

Amphenol LTW Technology Co. (LTW) & Amphenol Conec (ACON)

APPROVAL UL	YES
COMPATIBLE/COMPETITOR SERIES	
CONTACT TYPE	S&F PT SOLID
CONTACT WIRE GAUGE	AWG16-22/,25-1,5MM ²
EMI OPTION	YES
HARDWARE COUPLING MECHANISM	SCREWS
HARDWARE NR INSERT ARRANGEMENTS	8
IP RATING MATED	IP68
MATERIAL SHELL	PLASTIC
MATING CYCLES	1.000
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	30A
OPERATING TEMPERATURE	-40C TO +105C



USB WATERPROOF

Amphenol LTW Technology Co. (LTW) & Amphenol Conec (ACON)

APPROVAL UL	YES
COMPATIBLE/COMPETITOR SERIES	
CONTACT TYPE	USB
CONTACT WIRE GAUGE	USB
EMI OPTION	YES
HARDWARE COUPLING MECHANISM	REVERSE BAYONET
HARDWARE NR INSERT ARRANGEMENTS	6
IP RATING MATED	IP68
MATERIAL SHELL	PLASTIC
MATING CYCLES	1.000
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	20A
OPERATING TEMPERATURE	-40C TO +105C



USB | TYPE C WATERPROOF

Amphenol LTW Technology Co. (LTW)



Catalog



Presentation



FIBER OPTICS WATERPROOF

Amphenol LTW Technology Co. (LTW) & Amphenol Conec (ACON)

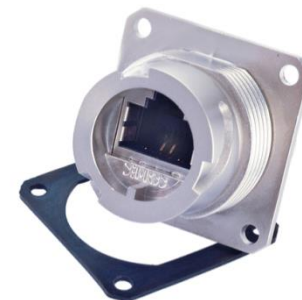
APPROVAL UL	YES
COMPATIBLE/COMPETITOR SERIES	NA
CONTACT TYPE	FIBER LC
CONTACT WIRE GAUGE	FIBER LC
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	REVERSE BAYONET
HARDWARE NR INSERT ARRANGEMENTS	1
IP RATING MATED	IP68
MATERIAL SHELL	PLASTIC
MATING CYCLES	1.000
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	NA
OPERATING TEMPERATURE	-40C TO +105C



RJ-45 WATERPROOF

Amphenol LTW Technology Co. (LTW) & Amphenol Conec (ACON)

APPROVAL UL	YES
COMPATIBLE/COMPETITOR SERIES	
CONTACT TYPE	RJ45
CONTACT WIRE GAUGE	RJ45
EMI OPTION	YES
HARDWARE COUPLING MECHANISM	REVERSE BAYONET
HARDWARE NR INSERT ARRANGEMENTS	1
IP RATING MATED	IP68
MATERIAL SHELL	PLASTIC
MATING CYCLES	1.000
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	7A
OPERATING TEMPERATURE	-40C TO +105C



A 3D rendered image of two white robotic hands, each holding a silver interconnect cable. The hands are positioned on the left and right sides of the frame, with their fingers gripping the cables. The background is a dark blue gradient with faint, out-of-focus images of interconnect components. The text 'YOUR PARTNER FOR INTERCONNECT SOLUTIONS' is centered in the middle of the image in a bold, white, sans-serif font.

YOUR PARTNER FOR INTERCONNECT SOLUTIONS