



AMPHENOL INDUSTRIAL PRODUCTS GROUP THE 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

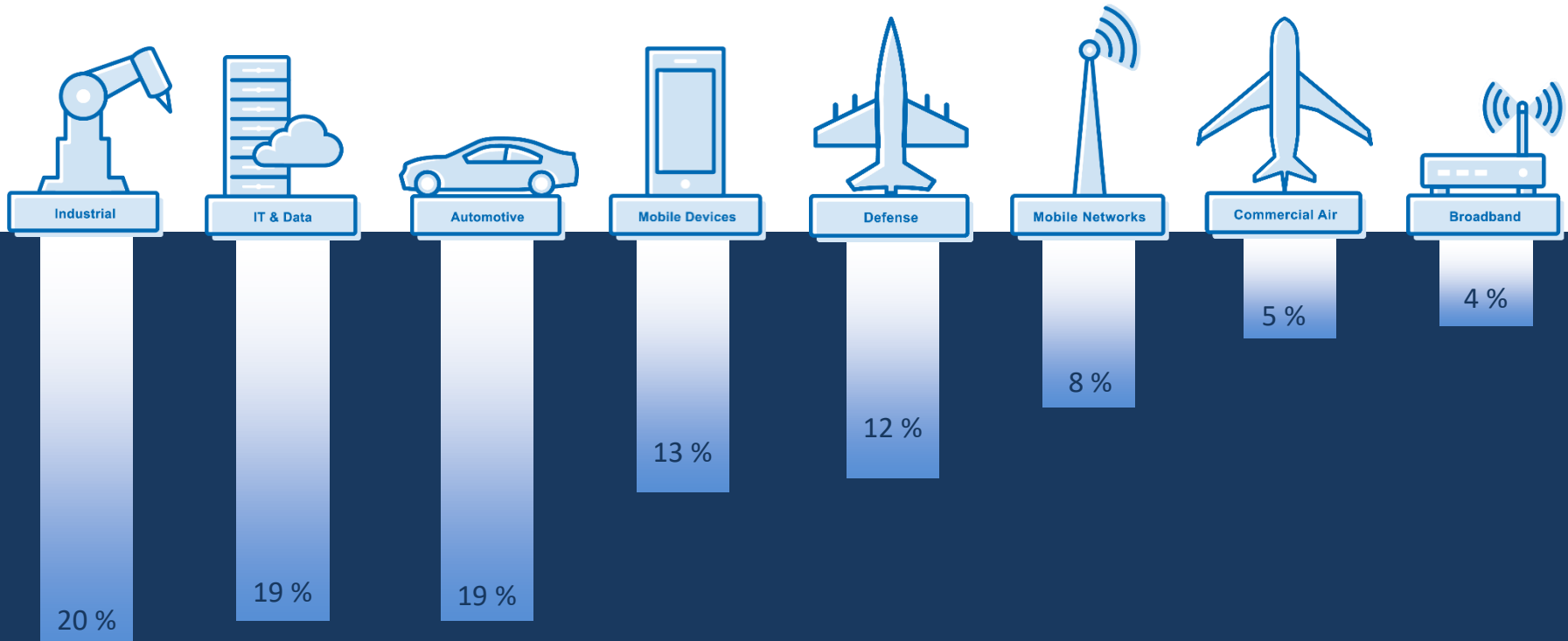


- BROAD GLOBAL PRESENCE AND CAPABILITY
- OVER 74,000 EMPLOYEES WORLDWIDE
- TOTAL NET SALES 2019: US \$ 8.225 BILLION



GLOBAL LEADER IN THE MARKET

% SALES BY MARKET

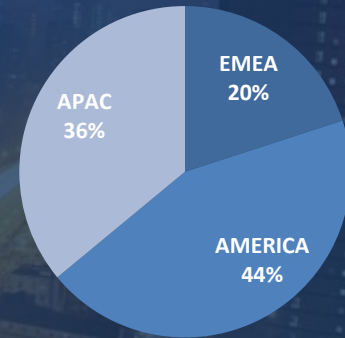


GLOBAL PRESENCE IN THE MARKET

% SALES BY MARKET



% SALES BY REGION



2019 SALES \$ 8,225 BIL

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

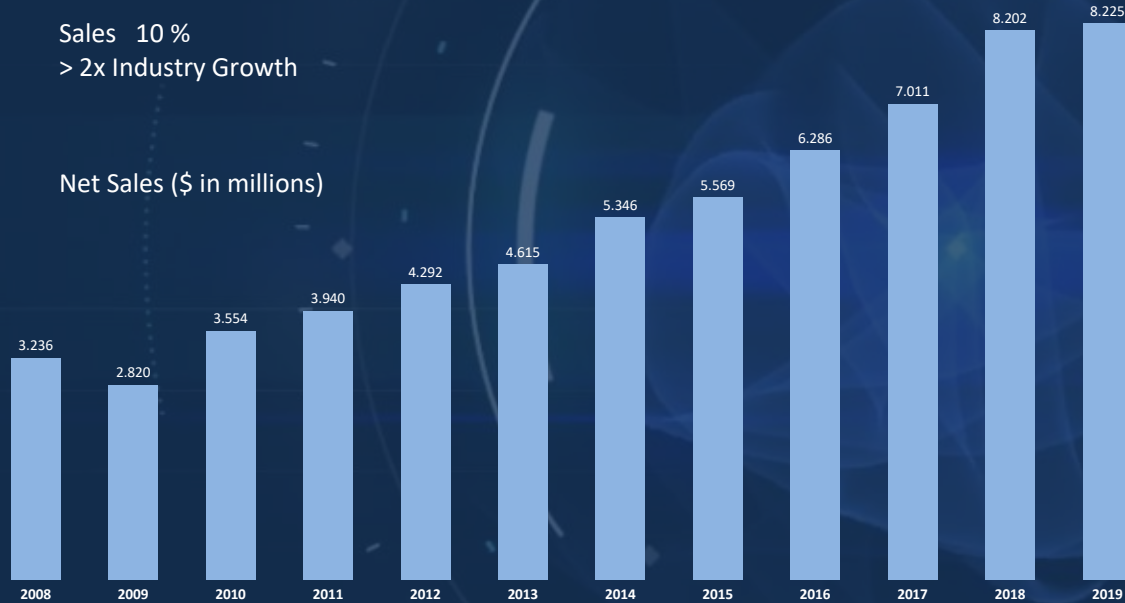
ENTREPRENEURIAL ORGANIZATION WITH SEPARATE P&L'S
HEADED BY STRONG LEADERS AND QUICK DECISION MAKERS

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 TPI
Winnipeg, Canada



Amphenol Tuchel Industrial
Heilbronn, Germany/Ostrov, CZ



Amphenol NeLson Dunn
Cerritos-CA, USA



Amphenol Industrial Operations
Nogales, Mexico



Amphenol Alden
Brockton-MA, USA



Amphenol Sine
Clinton Township-MI, USA



Amphenol Middle East
United Arab Emirates



Amphenol EEC
Chicago-IL, USA



Amphenol Oil&Gas Technologies
Houston-TX, USA



Amphenol DC Electronics
San Jose-CA, USA



Amphenol Australia
Carrum Downs, Australia



Amphenol Conec
Lippstadt, Germany



Amphenol Sincere
Guangzhou, China



Amphenol PCD
Shenzhen, China



Amphenol Goldstar
Baicheng / Yulin, China



Amphenol Daeshin
Bucheon-City, South Korea



Amphenol GEC
Changzhou, China



Amphenol Technology SZ
Shenzhen, China



Amphenol Anytek
Shenzhen, China



Amphenol Technology Zh
Zuhai, China



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

HEAVY EQUIPMENT

- Waterproof IP67 & IP69K
- Robust
- Vibration proof
- Power, signal & hybrid arrangements



AMPHENOL INDUSTRIAL SOLUTION FOR HEAVY EQUIPMENT



AT / ATM / ATP



ATC & AHD



AT PANEL MATE



AT BOARDMATE



AT HD



DURA|MATE AHDP



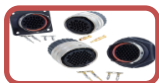
DURA|MATE AHDM



ISO|BUS



MIL-5015 GT



UPT SERIES



AMPHE|LITE



LPT SERIES



ECO|MATE RM



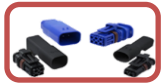
ECO|MATE AQUARIUS



ECO|MATE C16



MAX|M12



TRU|LOC



HC32



LVRC35



ARMOR-IPX



ECU HEADER



X|LOCK



USB/RJ45 IP68



AT BOOT



SUR|LOK PLUS



RAD|LOK



ACTIVE PIN|LOCK



A-SERIES – AT / ATM / ATP



CONTACT TYPE	SOLID & S&F
CONTACT WIRE GAUGE	AWG12-20/0,5-2,5MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	PUSH-PULL
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
COMPATIBLE SERIES	DT-DTM-DTP

PIN COUNT / LAYOUT

2 - 3 - 4 - 6 - 8 - 12 - 13 - 18



A-SERIES – AT / ATP PANEL MATE



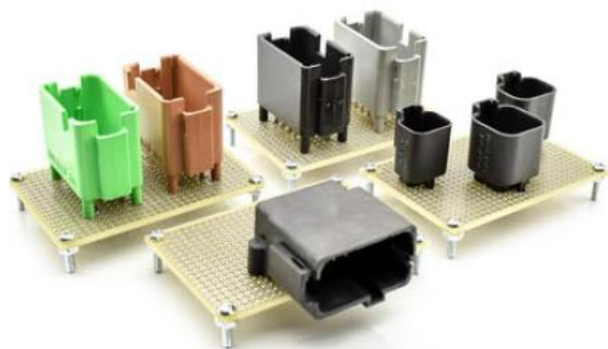
CONTACT TYPE	SOLID & S&F
CONTACT WIRE GAUGE	AWG12-20/0,5-2,5MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	PUSH-PULL
IP RATING MATED	IP67
MATERIAL SHELL	PLASTIC
MATING CYCLES	100
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	25A
OPERATING TEMPERATURE	-40°C TO +125°C
COMPATIBLE SERIES	DT-DTM-DTP

PIN COUNT / LAYOUT

2 - 3 - 4 - 6 - 8 - 12 - 18



A-SERIES – AT BOARDLOCK



CONTACT TYPE	PCB
CONTACT WIRE GAUGE	AWG16-18/,75-1,5MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	PUSH-PULL
IP RATING MATED	IP67
MATERIAL SHELL	PLASTIC
MATING CYCLES	100
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	13A
OPERATING TEMPERATURE	-40°C TO +125°C
COMPATIBLE/COMPETITOR SERIES	DT

PIN COUNT / LAYOUT

2 - 3 - 4 - 6 - 8 - 12 - 13



A-SERIES – ATHD



CONTACT TYPE	SOLID
CONTACT WIRE GAUGE	AWG12-8/2,5-10MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	LOCKING LATCH
IP RATING MATED	IP67
MATERIAL SHELL	PLASTIC
MATING CYCLES	100
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	120°
OPERATING TEMPERATURE	-55°C TO +125°C
COMPATIBLE SERIES	DTHD

PIN COUNT / LAYOUT

1 POLE – RADSOK OPTION



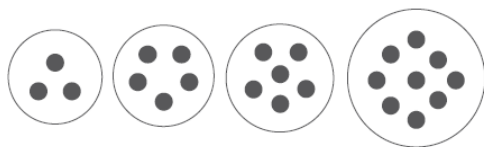
A-SERIES – ATC / AHD DIAGNOSTIC



CONTACT TYPE	SOLID & S&F
CONTACT WIRE GAUGE	AWG12-20/0,5-2,5MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	PUSH-PULL
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
COMPATIBLE SERIES	HD10

PIN COUNT / LAYOUT

3 – 5 – 6 – 9

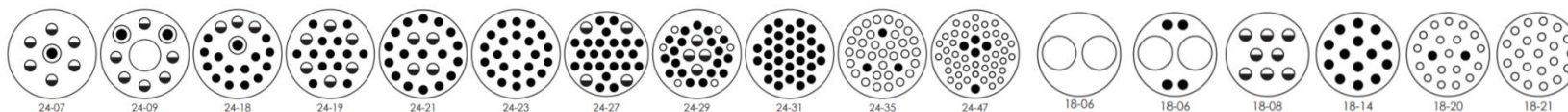


DURA|MATE – AHDP PLASTIC



CONTACT TYPE	SOLID & S&F
CONTACT WIRE GAUGE	AWG4-22/,5-16MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	BAYONET
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
COMPATIBLE/COMPETITOR SERIES	HDP20

SHELL SIZE / PIN COUNT #18 and #24

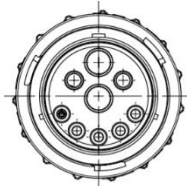


ISO|BUS – CONNECTORS & CABLE ASSEMBLIES



CONTACT TYPE	SOLID & S&F
CONTACT WIRE GAUGE	AWG8-12/2,5-10MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	BAYONET
IP RATING MATED	IP67 / IP69K
MATERIAL SHELL	PLASTIC
MATING CYCLES	100
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	60A
OPERATING TEMPERATURE	-55C TO +125C
COMPATIBLE/COMPETITOR SERIES	ISO 11783-2

PIN COUNT / LAYOUT



Hybrid > 2 x #8 + 2 x #12 + 5x16

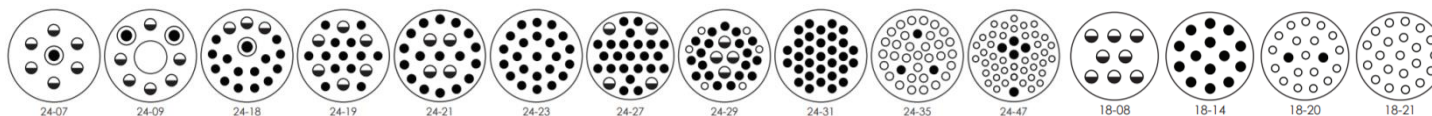


DURA|MATE – AHDM METAL



CONTACT TYPE	SOLID & S&F
CONTACT WIRE GAUGE	AWG4-22/,5-16MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	BAYONET
IP RATING MATED	IP67 / IP69K
MATERIAL SHELL	METAL
MATING CYCLES	100
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	135A
OPERATING TEMPERATURE	-55C TO +125C
COMPATIBLE/COMPETITOR SERIES	HD30

SHELL SIZE / PIN COUNT #18 and #24



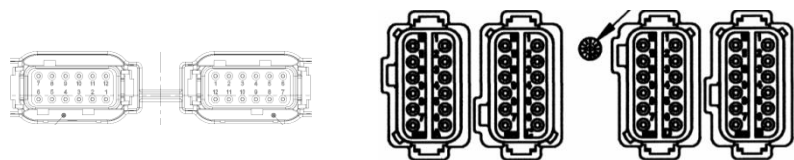
ENCLOSURE – ARMOR-IPX



CONTACT TYPE	CRIMP-PCB
CONTACT WIRE GAUGE	AWG12-20/0,5-2,5MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	PUSH-PULL
IP RATING MATED	IP67
MATERIAL SHELL	THERMOPLASTIC UL94-V0
MATING CYCLES	100
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	13A
OPERATING TEMPERATURE	-40°C TO +125°C
COMPATIBLE SERIES	TE EEC BOXES

PIN COUNT / LAYOUT

12 – 24 – 48 POLES



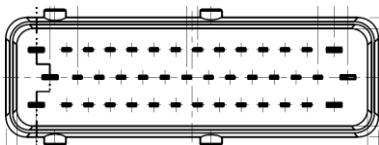
ENCLOSURE – ECU HEADER



CONTACT TYPE	CRIMP-PCB
CONTACT WIRE GAUGE	AWG12-20/0,5-2,5MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	PUSH-PULL
IP RATING MATED	IP67
MATERIAL SHELL	THERMOPLASTIC UL94-V0
MATING CYCLES	100
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	13A
OPERATING TEMPERATURE	-40°C TO +125°C
COMPATIBLE SERIES	TE EEC BOXES

PIN COUNT / LAYOUT

42 POLES (6+36)



TRU|LOC SERIES



CONTACT TYPE	S&F
CONTACT WIRE GAUGE	AWG12-20/0,5-2,5MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	LOCKING LATCH
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

PIN COUNT / LAYOUT

2 - 4 - 6



GT SERIES – MIL5015 / VG95234



CONTACT TYPE	SOLID
CONTACT WIRE GAUGE	AWG4/0-20/0,5-70MM ²
EMI OPTION	YES
HARDWARE COUPLING MECHANISM	REVERSE BAYONET
IP RATING MATED	IP67, IP68, IP69k
MATERIAL SHELL	FULL METAL
MATING CYCLES	2000
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	245A
OPERATING TEMPERATURE	-55C TO +125C
COMPATIBLE/COMPETITOR SERIES	VG95234

SHELL SIZE / PIN COUNT From #10 to #40
3 TO 85 POSITIONS*
* RADSOK OPTION AVAILABLE UP TO 500A



AMPHE | LITE – MIL38999



CONTACT TYPE	SOLID
CONTACT WIRE GAUGE	AWG12-22/,25-2,5MM ²
EMI OPTION	YES
HARDWARE COUPLING MECHANISM	ACME THREADED
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
COMPATIBLE/COMPETITOR SERIES	MIL38999

SHELL SIZE / PIN COUNT From #9 TO #25
2 TO 128 POSITIONS*



UPT SERIES



CONTACT TYPE	S&F
CONTACT WIRE GAUGE	AWG16-22/,25-1,5MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	BAYONET
IP RATING MATED	IP67
MATERIAL SHELL	PLASTIC
MATING CYCLES	500
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	41A
OPERATING TEMPERATURE	-55°C TO +125°C
COMPATIBLE/COMPETITOR SERIES	UTG

PIN COUNT / LAYOUT

SIZE From #12 to #16



LPT SERIES



CONTACT TYPE	SOLID & S&F
CONTACT WIRE GAUGE	AWG12-22/,25-2,5MM ²
EMI OPTION	YES
HARDWARE COUPLING MECHANISM	BAYONET
IP RATING MATED	IP67
MATERIAL SHELL	ALUMINIUM
MATING CYCLES	500
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	300A
OPERATING TEMPERATURE	-40°C TO +125°C
COMPATIBLE/COMPETITOR SERIES	UTO

PIN COUNT / LAYOUT

SIZE From #12 to #16



ECO|MATE – RUGGED METAL



CONTACT TYPE	SOLID & S&F
CONTACT WIRE GAUGE	AWG12-18/,75-2,5MM ²
EMI OPTION	YES
HARDWARE COUPLING MECHANISM	BAYONET
IP RATING MATED	IP67, IP68, IP69k
MATERIAL SHELL	ALUMINIUM
MATING CYCLES	500
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	300A
OPERATING TEMPERATURE	-40°C TO +125°C
COMPATIBLE/COMPETITOR SERIES	UTO

SHELL SIZE / PIN COUNT

#8, #10, #12, #14, #16, #18, #20, #22, #24

3 TO 48 POSITIONS*

*AVAILABLE SINGLE POLE RADSOK UP TO 300A



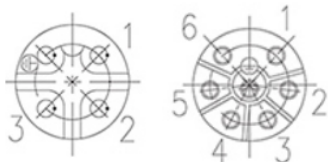
ECO|MATE – C16



CONTACT TYPE	SOLID & S&F
CONTACT WIRE GAUGE	AWG12-18/,75-2,5MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	THREADED
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
COMPATIBLE/COMPETITOR SERIES	RD24, CA SERIES

PIN COUNT / LAYOUT

3+PE, 6+PE



ECO | MATE – AQUARIUS

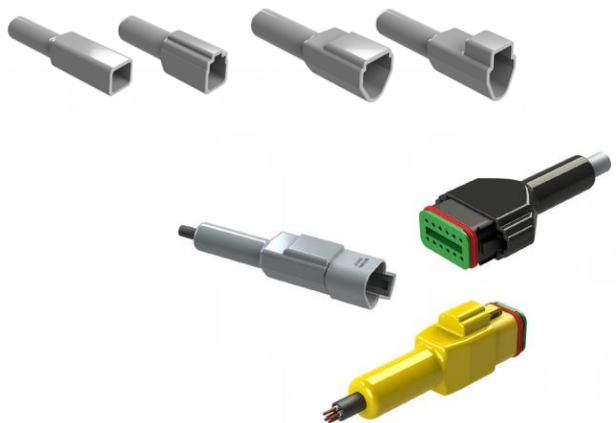


CONTACT TYPE	SOLID & S&F
CONTACT WIRE GAUGE	AWG12-18/,75-2,5MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	BAYONET
IP RATING MATED	IP67, IP68, IP69k
MATERIAL SHELL	PLASTIC
MATING CYCLES	500
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	22A
OPERATING TEMPERATURE	-40°C TO +125°C
COMPATIBLE/COMPETITOR SERIES	UTS

SHELL SIZE / PIN COUNT #8, #10, #12, #14, #16, #18
3 TO 32 POSITIONS



A-SERIES – AT BOOT



IP RATING MATED	IP67
MATERIAL	PLASTISOL
COLOUR OPTIONS	GREY, BLACK, YELLOW
OPERATING TEMPERATURE	-29°C TO +100°C
COMPATIBLE SERIES	AT 2-12 WAYS

PIN COUNT / LAYOUT 2 - 3 - 4 - 6 - 8 - 12



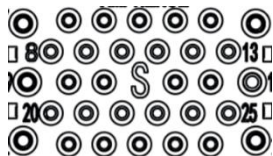
HC 32



CONTACT TYPE	SOLID & S&F
CONTACT WIRE GAUGE	AWG16-22/,25-1,5MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	LEVER +CPA
IP RATING MATED	IP67
MATERIAL SHELL	PLASTIC
MATING CYCLES	100
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	13A
OPERATING TEMPERATURE	-40°C TO +125°C

PIN COUNT / LAYOUT

32 POSITIONS (6 x 13A + 26 x 5A)



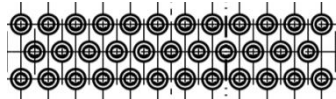
LVRC 26 & 35



CONTACT TYPE	SOLID & S&F
CONTACT WIRE GAUGE	AWG16-22/,25-1,5MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	PUSH-PULL
IP RATING MATED	IP67
MATERIAL SHELL	PLASTIC
MATING CYCLES	100
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	13A
OPERATING TEMPERATURE	-40°C TO +125°C

PIN COUNT / LAYOUT

26 (6+20) and 35 POSITIONS



X|LOKS SERIES



CONTACT TYPE	S&F
CONTACT WIRE GAUGE	AWG16-22/,25-1,5MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	PUSH-PULL
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

SHELL SIZE / PIN COUNT

3 TO 18 PINS
OVERMOULD ASSY AVAILABLE



USB & RJ45 SERIES



CONTACT TYPE	USB & RJ45
EMI OPTION	YES
HARDWARE COUPLING MECHANISM	THREAD, BAYONET, PP
IP RATING MATED	IP68
MATERIAL SHELL	PLASTIC, METAL
MATING CYCLES	500
OPERATING TEMPERATURE	-40C TO +85C

SHELL SIZE / PIN COUNT

USB A,B,C – RJ45
OVERMOULD ASSY AVAILABLE



MAX-M12 – RUGGEDIZED M12 SERIES



CONTACT TYPE	SOLID & S&F
CONTACT WIRE GAUGE	AWG16-22/,25-1,5MM ²
EMI OPTION	YES
HARDWARE COUPLING MECHANISM	M12 THREAD
IP RATING MATED	IP68
MATERIAL SHELL	PLASTIC, ALUMINIUM
MATING CYCLES	500
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	4A
OPERATING TEMPERATURE	-40°C TO +85°C
COMPATIBLE/COMPETITOR SERIES	M12

SHELL SIZE / PIN COUNT

3 TO 17 PINS



ACTIVE PIN | LOCK



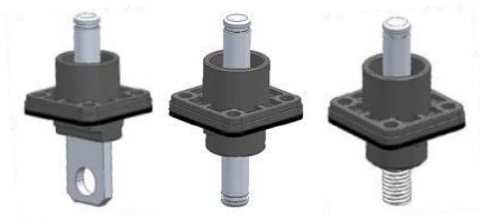
CONTACT TYPE	S&F
CONTACT WIRE GAUGE	10-50MM ²
EMI OPTION	NO
HARDWARE COUPLING MECHANISM	PUSH PULL + LOCKING
IP RATING MATED	IP2X
MATERIAL SHELL	PLASTIC
MATING CYCLES	1,000
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	200A
OPERATING TEMPERATURE	-40°C TO + 125°C
FEATURING	RADSOK TECHNOLOGY

CONTACT SIZE

RADSOK 8MM



RAD|LOK



CONTACT TYPE	SOLID
CONTACT WIRE GAUGE	10-120MM ²
EMI OPTION	YES
HARDWARE COUPLING MECHANISM	PUSH PULL + LOCKING
IP RATING MATED	IP40
MATERIAL SHELL	PLASTIC
MATING CYCLES	500
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	650A
OPERATING TEMPERATURE	-40°C TO + 125°C
FEATURING	RADSOK TECHNOLOGY

CONTACT SIZE

RADSOK 3.6 – 5.7 – 8 – 10 – 12 – 14 MM



SUR|LOK PLUS



CONTACT TYPE	SOLID
CONTACT WIRE GAUGE	16-95MM ²
EMI OPTION	YES
HARDWARE COUPLING MECHANISM	PUSH PULL + LOCKING
IP RATING MATED	IP67 / IP69K
MATERIAL SHELL	PLASTIC
MATING CYCLES	100
MAX CURRENT RATING ACCORDING TO EN91684 (AT 20C)	450A
OPERATING TEMPERATURE	-40°C TO + 125°C
FEATURING	RADSOK TECHNOLOGY

CONTACT SIZE

RADSOK 5.7 – 8 – 10.3 MM



A 3D rendered image of two white robotic hands, each holding a silver electrical connector. The hands are positioned on the left and right sides of the frame, with their fingers gripping the connectors. The background is a dark blue gradient with faint, out-of-focus images of various electrical connectors. The central text is in large, white, bold, sans-serif font.

YOUR PARTNER FOR INTERCONNECT SOLUTIONS