

# Amphenol-Tuchel Electronics 44 Series

## COST-EFFECTIVE ENVIRONMENTAL SEALING

Amphenol Tuchel 44 series connectors offer cost-effective performance for applications requiring environmental sealing. The connector's single-piece structure is resistant to water, fuel, lubricants, ozone, road salt and vibration.



### APPLICATIONS

- Automotive safety & security system connectors
- Traffic control equipment
- Marine industrial connectors
- Truck accessory disconnects
- Mining ventilation systems
- Car interconnections
- RV interconnections

### FEATURES

- Long-term resistance against environmental impacts
- 3 liquid-proof seals (primary, secondary & wire)
- Quick & easy assembly
- Quick & easy mating
- Protection against mismatching
- Protection class IP 65/67
- High-reliability
- Discrete wire interconnection
- 2 to 6 low-insertion-force types

### TECHNICAL SPECIFICATIONS

Rated Insulation Voltage	250 V~
Rated Impulse Withstand Voltage	1000 V~
Current Carrying Capacity	8 A
Insulation Resistance	> 5000 MΩ
Contact Resistance	< 30 mΩ
Operating Temperature	- 40°C to +105°C
Wire Gauge	18 – 14 AWG (1.0 - 2.5 mm <sup>2</sup> )
Overall Wire Insulation Diameter	0.080 to 0.130 inches (2.03 to 3.30 mm)
Contact Material	Tinned-copper alloy
Insulation Material	Santoprene, thermoplastic rubber
Mating Cycles	25 max.
Contact Retention	Axial displacement of contact < 0.03 inches (0,762 mm)
Color	Black

### PART NUMBERS

# OF CONTACTS	RECEPTACLE (PIN)	PLUG (SOCKET)	LOW-INSERTION	
			RECEPTACLE (PIN)	PLUG (SOCKET)
1	44-104-10001-02	44-103-10001	-	-
2	44-104-10002-02	44-103-10002	44-104-10302	44-103-10302
3	44-104-10003-02	44-103-10003	44-104-10303	44-103-10303
4	44-104-10004-02	44-103-10004	44-104-10304	44-103-10304
5	44-104-10005-02	44-103-10005	44-104-10305	44-103-10305
6	44-104-10006-02	44-103-10006	44-104-10306	44-103-10306

### CONTACTS & TOOLING

PIN CONTACTS (RECEPTACLES)	SOCKET CONTACTS (PLUG)	PCS	CRIMP TOOL		INSERTION TOOL	EXTRACTION TOOL
			W/O RATCHET	WITH RATCHET		
44-100-1414P	44-102-1414S	1	357-561	357-588	356-258	PIN
44-100-1414P-100-101	44-102-1414S-100-101	100	357-561	357-588	356-258	356-259
44-100-1414P-1000-101	44-102-1414S-1000-101	1000	357-561	357-588	356-258	SOCKET 356-260

# Amphenol-Tuchel C 091 Series



## SUITABLE FOR A WIDE RANGE OF APPLICATIONS

The Amphenol-Tuchel C091 series connectors are available in a variety of contact arrangements and have a metal integral strain relief. They are available in straight or right-angle configurations.

### APPLICATIONS

- Factory automation
- Motors
- Robotics
- Test & measurement
- Machine tools
- Heavy equipment
- Control systems
- Sensors

### FEATURES

- Available with crimp solder or PCB terminals
- Internal strain relief
- Ability to rewire
- Cable housing straight or right-angled
- UL registered file #E63093
- Front or rear mounting receptacles
- EMI-shielded, fully-mated on A&D types
- One cable housing for cables 6 to 8mm

### TECHNICAL SPECIFICATIONS

COMMON SPECIFICATIONS FOR C 091A, C 091B & C 091D		
Number of Contacts	3 - 8 Contacts	12 & 14 Contacts
Rated Voltage	250V	60V
Current Rating	5 A / +104°F (+40° C)	3 A / +104°F (+40°C)
Temperature Range	-40°F to +185°F (-40°C to +85°C)	
Mechanical Operation	Silver ≥ 500 mating cycles; Gold ≥ 1000 mating cycles	
Dielectric Material	Thermoplastic	
Contact Plating	Silver-plated / gold-plated **	
Termination Technique	Solder, crimp	Solder
Wire Gauge	Solder ≤ 0,5mm <sup>2</sup> (20-26 AWG), Crimp 0.14 – 0.75mm <sup>2</sup> (26-18 AWG)	≤ 0.25mm <sup>2</sup> / 24AWG
Flammability	UL 94 V0	

DIFFERENCES IN SPECIFICATIONS			
	C091A	C091B	C091D
Shell Style	C091A	C091B	C091D
IP-degree	IP40	IP40	IP67 / IP65
Housing Material	Coupling ring brass, strain relief, die cast, nickel-plated	Die cast, nickel-plated	Die cast, nickel-plated
Sealing Material	-	-	Neoprene
Locking System	Metal screw coupling	Bayonet	Metal screw coupling

### APPROVALS

UL



File #E63093

# Amphenol Ecomate™

## EXCELLENT FOR EXTREME ENVIRONMENTS FOUND IN INDUSTRIAL & MEDICAL APPLICATIONS

Amphenol Ecomate connectors are rugged and offer environmental protection under event extreme conditions. They are excellent for plant construction, machine building, control technology and medical applications. A wide selection of housings and shapes are available.



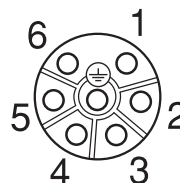
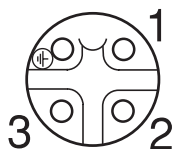
### APPLICATIONS

- Welding machines
- Machine tools
- Factory automation
- Electric motors
- Robotics
- Hydraulic controls
- Test & measurement
- Drive systems

### FEATURES

- Quick & easy to assemble
- Screwed cable gland with clamping ring
- Strain relief & mounted gasket all in one component
- Robust thread for cable clamp
- Fastening for protective cap on receptacle housing
- Available with crimp or solder-type terminals
- Circular connectors with 3+PE and 6+PE contacts
- Housing of premium molding material
- Cable housing straight or angled
- Vibration-safe connection through stable and non-sensitive screw locking
- Protection to IP65/67 in mated condition in accordance with DIN EN 60526
- Clamping ring or internal strain relief
- One cable housing for cables 6.0-12.5mm

TECHNICAL SPECIFICATIONS



Number of Contacts	3 + PE	6 + PE	
Electrical	Screw-Type	Solder-Type	Crimp-Type
Rated Insulation Voltage	400 V	250V	250V
Current-Carrying Capacity	16A / 131°F (+55°C)	12 A / 131°F (+55°C)	13 A / 131°F (+55°C)
Operating Temperature	-40°F to +212°F (-40°C to +100°C)		
IP-degree of Protection	IP65/IP67		
Mechanical Operation	500 mating cycles		
Housing Material	PA6.6/ PA6		
Dielectric Material	PA6.6/ PA6		
Gasket Material	Neoprene		
Contact Plating	Silver-plated/ Gold-plated		
Termination Technique	Screw	Solder	Crimp
Wire Gauge	0.75 to 2.5mm <sup>2</sup> (18-14 AWG)	0.75 mm <sup>2</sup> (20 AWG)	0.14-1.15 mm <sup>2</sup> (26-16 AWG)
Flammability	UL94 VO		

APPROVALS

		CHARACTERISTICS	APPROVAL #
VDE		3+PE, 400V, 16A	1781
		6+PE, 250V, 10A	1780
SEV		3+PE, 400V, 16A	00.0394
		6+PE, 250V, 6A	
UL		3+PE, 250V, 12A	E63093
		6+PE, 250V, 8A	
CSA		3+PE, 250V, 12A	48932
		6+PE,250V, 8A (Solder)	
		6+PE,250V, 15A (Crimp)	
GERMAN LLOYD		3+PE, 250V, 16A	14108/84
		6+PE, 50V, 8A	

# Amphenol Alden Pulse-Lok®



## UNIQUE COUPLING SYSTEM CREATES SECURE CONNECTIONS FOR MEDICAL APPLICATIONS

Amphenol Alden Pulse-Lok® connectors have a unique locking system with both tactile and audible confirmation for secure connections as well as quick-release action. These connectors are excellent for medical, factory automation, and instrumentation field applications. Many contact types are available, including signal, power, high-voltage, and Ethernet.

### APPLICATIONS

- Medical
- Factory automation
- Test & measurement
- Sensors
- Military (soldier communication)
- Renewable energy

### FEATURES

- Quick-release action
- Tactile & audible mating confirmation
- IP67 sealed
- Low-insertion
- High mating cycles
- Small package (.500 – 1.2" dia.)
- 1 to 78 conductors
- EMI-shielding
- Field-installable versions
- Sterilization version
- Ergonomic

### TYPES



PL-500SM-N



PL-700RG-N



PL-700SM-B



PL-700SM-N



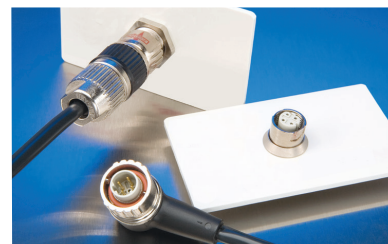
PL-900SM-N



PL-1200RG-N



PL-1300EN-V



PL-PULSEPLUS