# **≣FCi Basics**

# Amphenol

# MicroSpace<sup>™</sup> Crimp-To-Wire Connector Platform

# COMPACT, ROBUST AND VERSATILE CONNECTORS SYSTEM

MicroSpace<sup>™</sup> Crimp-to-Wire connector platform's unique design enables LV214 Severity-2 and performs at 1.27mm, 1.5mm, and 1.8mm pitch. MicroSpace<sup>™</sup> will be available in single and double row versions, with top and side latch configurations.

- LV214 Severity-2 Compatible
- Keying to prevent visual mismatching
- Terminal Positioning Assurance (TPA)
- Primary and secondary contact retention
- Connector Positioning Assurance (CPA)



#### **FEATURES**

- Design based on existing and proven design controls
- Existing crimp section and automated crimp tooling up to 22AWG
- 4N normal force for vibration and >60N connector locking strength
- Poka-yoke polarization
- Terminal Positioning Assurance (TPA)
- Current rating up to 4A per contact
- Connector Positioning Assurance (CPA)
- Low insertion force terminal available

#### BENEFITS

- Suitable for harsh environments
- No specific industrial tools required
- High vibration and locking resistance
- Visual mismatching prevention system
- Ensures proper terminal insertion position and retention
- Meets higher power performance requirements
- Assures that connectors are properly mated and locked together
- Makes it easier to mate with receptacle

# **TECHNICAL INFORMATION**

#### MATERIAL

- Contact for Board Header Connector: High Current Alloy with optional Tin and Gold plating
- Housing: High Temperature Thermoplastic, UL94V-0
- Crimping Terminal: High Current Alloy with optional Tin and Gold plating

#### **MECHANICAL PERFORMANCE**

- Terminal Insertion Force/Terminal: <3N</li>
- Terminal Retention into Housing: >50N
- Durability: 20 mating cycles for Sn; 100 mating cycles for Au
- Wire Pullout Force for 0.35qmm<sup>2</sup>: >50N min.

#### **APPROVALS AND CERTIFICATIONS**

LV214 - Severity 2 Compatible

#### PACKAGING

- PCB Header: Tape & Reel
- Receptacle Housing: Bag
- Terminal: Reel

#### **ELECTRICAL PERFORMANCE**

- Low Level Contact Resistance: <30m $\Omega$
- Insulation Resistance: >100M $\Omega$
- Voltage Rating: 12V 48V
- Current Rating:
  - 1.27mm pitch Staggered: 4A
  - 1.27 mm pitch Side To Side: 2A
  - 1.5mm pitch: 3A
  - 1.8mm pitch: 4A
- Dielectric Withstanding Voltage: 500VAC
- Temperature Rise: 30°C max.

#### **ENVIRONMENTAL**

• Operating Temperature Range: -40°C to +130°C

#### **TARGET MARKETS/APPLICATIONS**

2	-5
1	

Camera/Sensor Cluster/Navigation HVAC Headliner Lighting Power Steering Radio/DVD

### **PART NUMBERS**

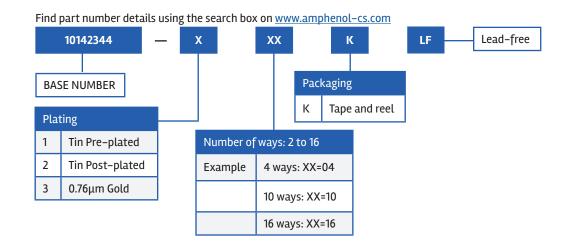
Description			Configuration			
Pitch	Versions	No. of Ways	Header Assembly (Horizontal)	Header Assembly (Vertical)	Receptacle Assembly	Crimp-to-Wire Receptacle
1.27mm	Staggered	2–3	10142396*	10142407*	10142395*	10141272*
		4–16	10142344*	10143535*	10142348*	10141272*
1.5mm	Single Row	2	10159808*	10159449*	10156818*	10141272*
1.8mm	Single Row	4	10142963*		10142961*	10141272*

Find part number details using the search box on www.amphenol-cs.com

\*denotes base part number. Please contact Amphenol for complete part numbers and for other available configurations

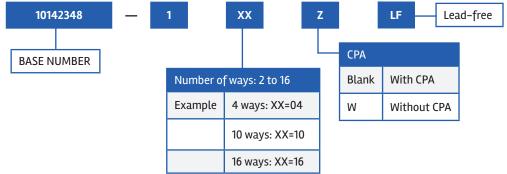
# www.amphenol-cs.com

## **PART NUMBER SELECTOR – HEADER**

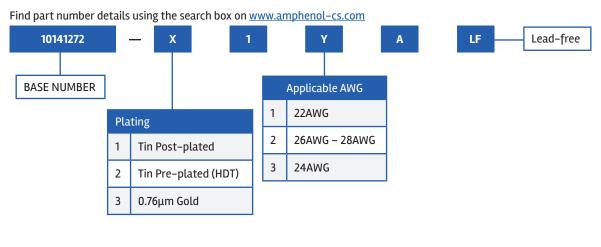


# **PART NUMBER SELECTOR – RECEPTACLE**

Find part number details using the search box on <u>www.amphenol-cs.com</u>



# **PART NUMBER SELECTOR – TERMINALS**



BASICSMICROSPACE1224EA4

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