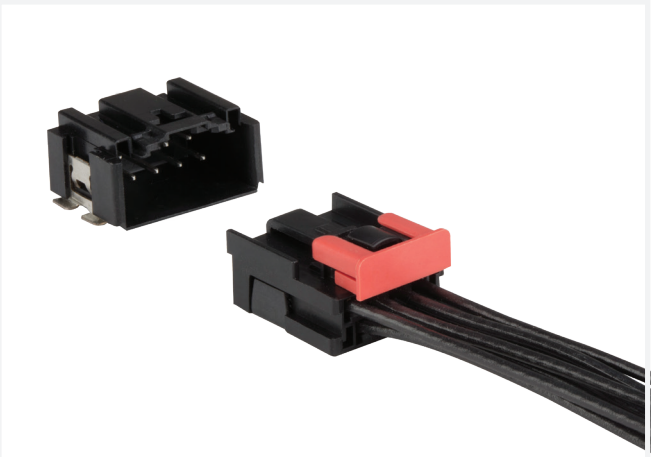
MicroSpace™ Crimp–To–Wire Connector Platform

COMPACT, ROBUST AND VERSATILE CONNECTORS SYSTEM

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

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



TARGET MARKETS

FEATURES	BENEFITS
Design based on existing and proven design controls	Suitable for harsh environments
Existing crimp section and automated crimp tooling up to 22 AWG	No specific industrial tools required
4 N normal force for vibration and >60 N connector locking strength	High vibration and locking resistance
Poka–yoke polarization	Visual mismatching prevention system
Terminal Positioning Assurance (TPA)	Ensures proper terminal insertion position and retention
Current rating up to 4 A per contact	Meets higher power performance requirements
Connector Positioning Assurance (CPA)	Assures that connectors are properly mated and locked together
Low insertion force terminal available	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, UL94 V–0
- Crimping Terminal: High Current Alloy with optional Tin and Gold plating

MECHANICAL PERFORMANCE

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

APPROVALS AND CERTIFICATIONS

- LV214 – Severity 2 Compatible

PACKAGING

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

ELECTRICAL PERFORMANCE

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

ENVIRONMENTAL

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

TARGET MARKETS/APPLICATIONS



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

PART NUMBERS

Description			Configuration			Accessory
Pitch	Versions	No. of Ways	Header Assembly (Horizontal)	Header Assembly (Vertical)	Crimp–to–Wire Receptacle	Part Numbers
1.27 mm	Staggered	2–3	10142396*	10142407*	10141272 / 10148496*	10146487*
		4–16	10142344*	10143535*		
1.5 mm	Single Row	2	10159808*	10159449*		
1.8 mm	Single Row	4	10142963*			

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

Disclaimer
Please note that the above information is subject to change without notice.

PART NUMBER SELECTOR – HEADER

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

10142344 — **X** **XX** **K** **LF** Lead-free

BASE NUMBER

Plating	
1	Tin Pre-plated
2	Tin Post-plated
3	0.76 µm Gold

Number of ways: 2 to 16	
Example	4 ways: XX=04
	10 ways: XX=10
	16 ways: XX=16

Packaging	
K	Tape and reel

PART NUMBER SELECTOR – RECEPTACLE

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

10142348 — **1** **XX** **Z** **LF** Lead-free

BASE NUMBER

Number of ways: 2 to 16	
Example	4 ways: XX=04
	10 ways: XX=10
	16 ways: XX=16

CPA	
Blank	With CPA
W	Without CPA

PART NUMBER SELECTOR – TERMINALS

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

10141272 — **X** **1** **Y** **A** **LF** Lead-free

BASE NUMBER

Plating	
1	Tin Post-plated
2	Tin Pre-plated (HDT)
3	0.76 µm Gold

Applicable AWG	
1	22 AWG
2	26 AWG – 28 AWG
3	24 AWG

WHERE INNOVATION CONNECTS
Scan to learn more ▶

BASICSMICROSPACE0226EA4

Disclaimer
Please note that the above information is subject to change without notice.