

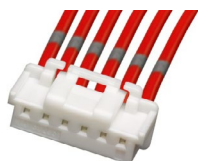
DuraClik 2.00mm Wire-to-Board Connector System ➤

DuraClik 2.00mm-Pitch Wire-to-Board Connectors provide superior electrical contact reliability, space savings and high PCB retention force capability. These connectors are designed to improve connection security and performance in challenging environments subject to high vibration and high temperatures.

DuraClik Feature	DuraClik Standard	DuraClik TPA	DuraClik ISL	DuraClik Robust Dual-Row
Receptacle Size (Depth)	6.50mm	7.45mm	8.50mm	17.70mm
Current (max.)	3.0A	3.0A	3.0A	3.3A
Temperature Rating	-40 to +105°C	-40 to +125°C	-40 to +130°C	-40 to +125°C
Receptacle Termination	Crimp	Crimp	Crimp	Crimp
Retention Force	9.8N	20N	50N	100N
Retainer	-	Y	Y	Y
Available Circuit Sizes	2 to 15	2 to 15	2 to 10, 12, 13, 15	16, 24
Plating	Tin, gold	Tin, gold	Tin, gold	Tin
Header Size (Depth)	8.00mm (vertical), 9.40mm (right angle)			18.30mm
Header Termination	Surface-mount technology (SMT)			SMT
Available Header Circuit Sizes	2 to 15			16, 24
Header Temperature Rating	-40 to +130°C			-40 to +125°C



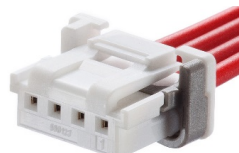
Standard/TPA/
ISL Header



Standard
Receptacle



TPA Receptacle



ISL Receptacle



Robust Dual-Row
Receptacle



Robust Dual-Row
Header

ADVANTAGES AND FEATURES

Ensures secure connector-to-PCB header retention

Robust secondary lock variants and wide solder tabs can withstand an upward pull force of 100N (10kgf) to meet automotive vibration requirements and help prevent accidental disconnections.

Confirms correct and secure mating: durability + click (sound) = DuraClik

An audible click sound on mating and built-in inertia lock available in versions up to 15 circuits help prevent mis-mating errors and ensure a reliable connection.

Offers greater design flexibility

Different header options of 2 to 24 circuits—in vertical, horizontal, single- and dual-row configurations—are available, reducing design challenges.

Delivers automotive-grade robustness

The ISL receptacle meets manufacturer specifications, including ES91500-03 and LV214. It has passed LV214 S2 and S3, as well as SAE/USCAR2 V2 vibration standards, and complies with OPEN Alliance 100BASE-T1 and 10BASE-T1 standards.

Helps prevent unintended disconnection

An inner positive lock provides secure mating and space savings, helping prevent latch breakage from wire tangling.

Permits use in high-level automotive passenger compartment applications

The DuraClik design's operating temperature range of -40 to +130°C (depending on version) ensures reliability and helps prevent failures in challenging conditions.

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APPLICATIONS

Automotive

Battery management systems
Camera modules
DC-DC converters
Door modules
Electric vehicle controllers
Gear shifts
Headlamps and tail lamps
Head-up displays
Infotainment systems
Interior lights
Inverter components
LED driver modules
LED lights
Meter systems
Navigation systems
Onboard chargers
Power distribution units
Rear combination lamps
Rearview mirrors
Seat adjusters
Sensors
Speakers and microphones
Steering switches
Telematics modules
Vehicle connectivity systems

Commercial Vehicle

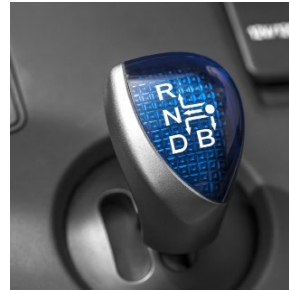
Cranes
Industrial machinery
Tractors

Consumer

E-bike battery management systems
Energy storage systems
Induction cooking heaters
LED lighting
Vending/gaming machines
White goods



LED Lighting



Gear Shifts



White Goods



Battery Management Systems



Energy Storage Systems



Induction Cooktops

DuraClik 2.00mm Wire-to-Board Connector System

SPECIFICATIONS

REFERENCE INFORMATION

Packaging:
 Header—embossed tape and reel
 Housing, retainer—bag, tray
 Terminal—reel
 Designed In: Millimeters
 RoHS: Yes
 Low Halogen: Yes
 Ethernet Protocols (ISL Version):
 100BASE-T1, 10BASE-T1

ELECTRICAL

Voltage (max.): 125V
 Current (max.): 3.0A (Standard, TPA, ISL);
 3.3A (Robust)
 Contact Resistance (max.): 10 milliohms
 Dielectric Withstanding Voltage: 500V AC
 Insulation Resistance (min.): 1,000 Megohms

MECHANICAL

Contact Retention to Housing:
 Standard version—9.8N
 Terminal position assurance (TPA) version—20N
 ISL version—50N
 Robust version—100N

PHYSICAL

Housing:
 Standard, ISL, Robust—PBT
 TPA—PA
 Retainer: PBT
 Header Housing: Polyamide
 Header Attachment: Surface-mount technology
 Header Terminal: Copper alloy
 Terminal Contact: Phosphor bronze
 Plating:
 Contact area—tin or gold
 Solder tail area—tin
 Underplating—nickel
 Operating Temperatures:
 -40 to +105°C (Standard)
 -40 to +125°C (TPA, Robust)
 -40 to +130°C (ISL)

ORDERING INFORMATION

DuraClik Connectors

Version	Circuits	Housing	Retainer	Terminal		
				Series	Plating	Wire Gauge
Standard	2 to 15	502351 (natural or black)	-	50212	Tin	30 to 24 AWG
				560085	Tin	26 to 22 AWG
				56161	Gold	26 to 22 AWG
TPA	2 to 15	505151 (black or white)	505152 (gray)	505153	Tin	24 and 22 AWG
				505487	Gold	24 and 22 AWG
ISL	2 to 15	560123 (white, black, red, blue)	560125 (gray, black)	560124	Tin or gold	AVSS 0.30mm ² FLRY-A 0.35mm ² Mocar150C 0.35mm ² 0.22mm ²
Robust	16 or 24	206583 (black)	-	503116	Tin	0.30 to 0.50mm ²

DuraClik Headers

Version	Circuits	Header Direction	Plating	Color
Standard	2 to 15	502352 (right angle)	Tin	Natural, black, red, blue
			Gold	Natural
		560020 (vertical)	Tin	Natural, black, red, blue
			Gold	Natural
Robust	16 or 24	206584	Tin	Black

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