

MXP120 Sealed Connector System

The high-performing, compact MXP120 Sealed Connection System is ideal for harsh environments and space-constrained designs for safety, body electronics and powertrain applications.



MXP120 Sealed Connector System
Left: Yellow 2-Circuit Safety
Right: Black 3-Circuit Engine

FEATURES AND ADVANTAGES

Female receptacles with Independent Secondary Locking (ISL)

Ensures efficient terminal positioning and detection of partial installation of terminals

Shrouded Female Receptacles

- Can be medium or long for 1 by 4 and larger
- Short for 1 by 2 and 1 by 3
- Ensures all circuit sizes and keying options are scoop proof

Space-saving 1.20mm terminals in a 4.00mm pitch

- Meets power requirements up to 13.0A
- Suitable for sealed safety-restraint, body electronics and powertrain applications

Accommodates wire gauges up to 1.00mm²

Limits connector pitch to 4.00mm with SWS

Single wire seal (SWS) connection system with robust perimeter seal

- Is IPX8 rated. IPX9K under evaluation
- Withstands high-pressure spray environments

Male blade connectors with Primary Lock Reinforcement (PLR)

Ensures efficient terminal positioning and detection of partial installation of terminals

Reduced package size when compared to existing 1.50mm connection systems

Offers significant space savings for confined design parameters

Compatible with AK and USCAR interfaces; designed using worldwide AK cavity definition

Confirms global acceptance and marketability

Integral locking latch and bridge protection

Fully protected latch with integral bridge for reliable and efficient connector locking

Ergonomic and robust connector position assurance (CPA)

- Enlarged CPA vs. competitor versions, for superior ergonomics
- Robust CPA design limits the risks of breakage (during handling/wires snagging) or pre-seating (of itself) prior to connector mating
- CPA actuation is a one-step process to minimize assembly operation
- After connector mating, the CPA and integral latch combine to stabilize the connector interface without any impact to mating force

Available with wire dress covers

- Male connectors offer compatibility with off-the-shelf wire dress covers
- Wire dress covers for receptacles in development. They will offer compatibility with MXP120 latch protection and enlarged CPA

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FEATURES AND ADVANTAGES



Receptacle connectors utilize a preassembled, side-loaded independent secondary lock (ISL):

- Improves terminal servicing
- Checks correct terminal position and reinforces primary terminal retention



Male blade connectors utilize a preassembled front-loaded primary lock reinforcement (PLR), also known as terminal position assurance (TPA)

- Helps to minimize the number of components, making this connector very price competitive
- Improves terminal servicing
- Checks finger position of terminal latch and reinforces terminal retention

MARKETS AND APPLICATIONS

Automotive (Electric Vehicles)

Door-lock mechanisms
Airbags—steering wheel/side/curtain
Exterior lighting
Safety/chassis
Safety restraint systems (SRS)
Seat-belt pretensioners
Turn signal lamps
Supplemental inflatable restraints (SIR)

Automotive (Internal Combustion Engines)

Door-lock mechanisms
Fuel injection
Airbags—steering wheel/side/curtain
Emission controls
Exterior lighting
Ignition coil
Safety/chassis
Safety restraint systems (SRS)
Seat-belt pretensioners
Supplemental inflatable restraints (SIR)
Turn signal lamps

Consumer

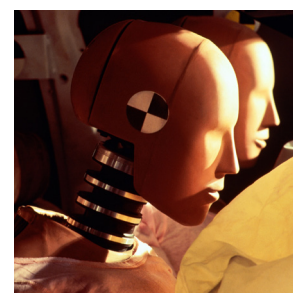
Any medium-power sealed applications up to 13.0A

Commercial Vehicle

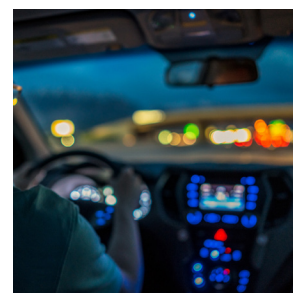
Airbags—steering wheel/side/curtain
Door-lock mechanisms
Emission controls
Exterior lighting
Fuel injection
Ignition coil
Safety
Safety restraint systems (SRS)
Seat-belt pretensioners
Supplemental inflatable restraints (SIR)
Turn signals (indicators)



Ignition Coils & Fuel Injectors



In-Vehicle Safety: Airbags



Lighting, Turn Signals, Door Locks

www.molex.com/link/mxp120.html