

# 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

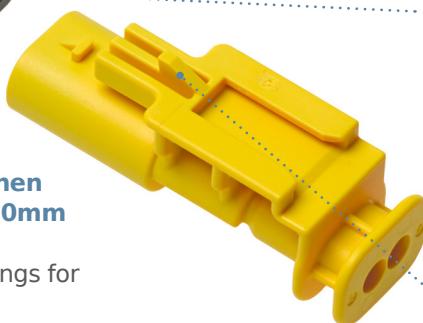
### Female receptacles with Independent Secondary Locking (ISL)

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



### Reduced package size when compared to existing 1.50mm connection systems

Offers significant space savings for confined design parameters

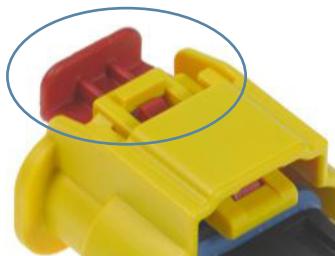
### Compatible with AK and USCAR interfaces; designed using worldwide AK cavity definition

Confirms global acceptance and marketability



### Integral locking latch and bridge protection

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



### 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

### 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 1.00mm<sup>2</sup>

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

### 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

# MXP120 Sealed Connector System ➤

## 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

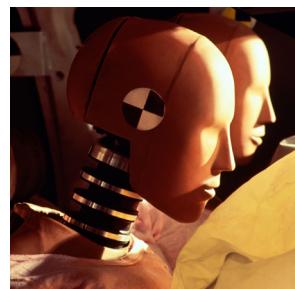
Any medium-power sealed applications up to 13.0A

### Commercial Vehicle

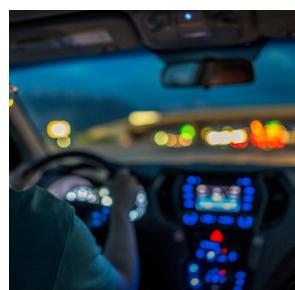
Airbags—steering wheel/side/curtain  
Door-lock mechanisms  
Emission controls  
Exterior lighting  
Fuel injection  
Ignition coil  
Safety  
Safety restraint systems (SRS)  
Seat-belt pretensioners  
Supplemental inflatable restraints (SIR)  
Turn signals (indicators)



*Ignition Coils & Fuel Injectors*



*In-Vehicle Safety: Airbags*



*Lighting, Turn Signals, Door Locks*

[www.molex.com/link/mxp120.html](http://www.molex.com/link/mxp120.html)