



New generation 84-circuit Sealed Rectangular Connectors, with single-handed blind mate functionality, use proven MX150™ and MX150L™ terminals to offer a hybrid, high power-and-signal circuit-count system for harsh applications in commercial vehicles

Commercial vehicle applications, especially agricultural machinery, are becoming more intelligent with increased wiring requirements and demands for hybrid technology. The new generation SRC family offers a rugged, sealed, wire-to-panel (bulkhead) and wire-to-wire hybrid connection system designed for high circuit-count applications in harsh environments. The primary location for this system is as the firewall connector, situated between the cab and the engine, but SRC can also replace existing circular connectors in various in-vehicle applications.

The SRC system uses proven MX150™ terminals with current ratings up to 18A and MX150L™ terminals with current ratings up to 40A. Flexible standard or mixed power/signal options are available. The MX150 and MX150L terminal systems provide cost savings by eliminating the need to purchase, handle and crimp individual wire seals. This proven terminal technology provides flexibility to increase circuit count and allows for simple field repair and replacement of headers and connectors.

Optional flange seal and conduit interface are available. Tooling options include fine-adjust crimp press applicators for high-volume production and hand tools for low volume production and field repairs. For additional information visit: www.molex.com/link/src.html

Features and Benefits

Pre-assembled connector housing, seals, rear cover and TPA ship in one-piece

Easier, quicker assembly processes resulting in applied labour and cost savings

Simple crimp, poke and plug application using standard MX150™ and MX150L™ terminals; no need to crimp individual wire seals

Flexible system; easily increase circuit count using existing connectors
Quick, low cost field repairs using common screw driver, needle nose pliers and terminal extraction tool

Sliding latch with cam action

Single-handed mating and locking action; no screw action or tools required for mating assembly
Latch does not interfere with wire harness

Integral Terminal Position Assurance (TPA) with new anti-scooping feature

Assures that crimped terminal leads are properly locked into connector
Prevents terminals from being damaged during mating operation

Integral, two-way matte seal plus interface seal with improved retention features

Passes IP69K testing; suitable for applications in harsh environments
Interface seal now securely retained in two directions

Protective rear conduit interface for female connector

Protects and provides strain relief to wireseal interface

Connector system retention greater than 200N

Suitable for harsh applications in high vibration environments

Superior electrical and mechanical performance capabilities

Surpasses performance of most other competitive products in the market

Unused circuits can be blocked using plastic seal plugs

Provides flexibility; sealing unused circuits without adding complexity to part numbers and customer inventory

SRC – Sealed Rectangular Connectors

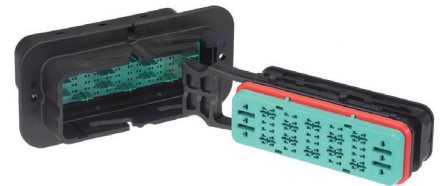
93287 84-Circuit Header

93288 84-Circuit Connector

85083 Power & Signal Header

85084 Power & Signal Connector

93286 Conduit Interface



SRC (Sealed Rectangular Connectors)



Conduit Interface



MX150™ Terminals
Female (Left) Male (Right)



MX150L™ Terminals
Female (Left) Male (Right)



Applications

Agricultural machines
Construction and mining equipment
Forest and garden equipment
Commercial vehicles
Marine equipment
Generator sets (Gensets)
Search, detection and navigation equipment
Trains and rail equipment
Material handling equipment

Additional Product Features

Modular design with 7 segments (A to G) which can be either power or control segments

One control segment consists of 12 circuits

One power segment consists of 3 circuits

Control circuits use MX150 terminals up to 18A

Power circuits use MX150L terminals up to 40A

Possible circuit options for shell size B:

84 + 0 (Control only)
72 + 2
60 + 6
48 + 7
36 + 12
24 + 14
12 + 18
0 + 20 (Power only)

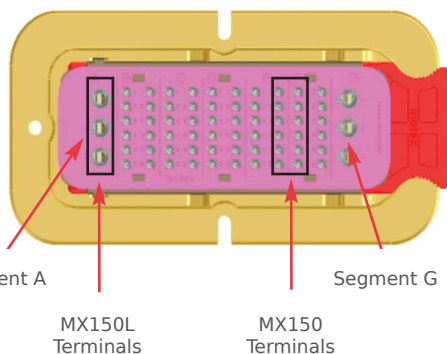
SRC – Sealed Rectangular Connectors



Female Connector



60 + 6 Way SRC



Anti-Scooping Feature

Addition of new plastic stand-offs arranged within the TPA prevents damage to terminals when header and connector are mated



TPA with plastic stand-offs, molded in one piece



Optional Conduit Interface

Different cable exit options available. See Sales Drawing for full details



Specifications

REFERENCE INFORMATION

Packaging: See PK-85071-001 and PK-85070-001
Mates With:
85084 mates with 85083
93288 mates with 93287
Use With:
MX150 Terminals series 33012/33000
MX150L Terminals series 19434/19431
Designed In: mm
RoHS: Yes
Halogen Free: Yes
Glow Wire Compliant: Yes

ELECTRICAL

Voltage (max.): 500V DC
Current (max.):
-84 way fully loaded 6A* with 30° temp rise (AWG 14 MX150) (*individual terminal 18amps)
-20 way fully loaded 15A* with 30° temp rise (AWG 8, MX150L) (*individual terminal 40amps)
Contact Resistance:
10 milliohm max. (MX150)
30 milliohm max. (MX150L)
Insulation Resistance: 20 milliohm min.

SRC – Sealed Rectangular Connectors

MECHANICAL

Contact Insertion Force: 200N max.
Contact Retention to Housing: 50N min.
Mating/Unmating Force: 200N max.
Results from sample trial:
Average Measured Mating Force: 98N
Measured Mating Force: 111N max.
Measured Mating Force: 84N min.
Durability (min.): Tin: 25 cycles
Gold: 100 cycles

PHYSICAL

Housing: SPS/ Nylon
Contact: See MX150 and MX150L
Operating Temperature: -40 to +125°C
Degree of protection: IP68 / IP69K

Ordering Information

Connectors and Headers

Order No.	No. of Circuits		Gender
	Control MX150™ Terminals	Power MX150L™ Terminals	
93287-0001	84	0	Female
93288-0001			Male
85084-0700	60	6	Female
85083-0300			Male
85084-2414	24	14	Female
85083-2414			Male

Additional power and signal SRC versions 72+2, 48+7, 36+12, 12+18, 0+20 available on request. Please contact Molex

Conduit Interface

Order No.	
93286-xxxx	Contact Molex for more details

MX150 Terminals (Control) - Insulation overall diameter 1.50 to 2.69mm

Gender	MX150 Terminals Order No.	AWG	mm²	Hand Crimp Tool	Applicator
Female	33012-3003	22	-	63811-6000	63900-1000
		-	0.5	63811-6200	63900-1000
	33012-3002	20/18	-	63811-6000	63900-0900 (20 AWG) 63900-0800 (18 AWG)
		-	0.75/1	63811-6200 (0.75mm²) 63811-6100 (1mm²)	63900-0900 (0.75mm²) 63900-0800 (1mm²)
	33012-3001	16/14	-	63811-5900	63900-0700
		-	1.5	63811-6100	63900-0700
Male	33000-1003	22	-	63811-2600	63900-0600
		-	0.5	-	63900-0600
	33000-1002	20/18/16	-	63811-2600 (20/18 AWG) 63811-2400 (16 AWG)	63900-0500 (20 AWG) 63900-0400 (18 AWG) 63900-0300 (16 AWG)
		-	0.75/1	-	63900-0500 (0.75mm²) 63900-0300 (1mm²)
	33000-1001	14	-	63811-2400	63900-0200
		-	1.5	-	63900-0200

Ordering Information

MX150L Terminals (Power) - Insulation overall diameter 3.61 to 5.54mm

**SRC – Sealed
Rectangular
Connectors**

Gender	MX150L Terminals Order No.	AWG	mm ²	Hand Crimp Tool	Applicator
Female	19434-0001	10-12	-	63811-5300	63895-0400
	19434-0002	8	-	63811-5400	63832-5100
Male	19431-0001	10-12	-	63811-5300	63895-0400
	19431-0015	8	-	63811-5400	63832-5100