



# SMARTSEAL CONNECTOR

## ECU Connections Made Easy

An innovative, headerless ECU connector for harsh environments

TE Connectivity (TE) Industrial & Commercial Transportation's SmartSeal connector (TE part number 2305186-1) is designed to be the next generation ECU connectivity solution. This innovative connector mates directly to an overmolded PCB ECU housing, eliminating the need for a separate PCB header and sealed enclosure, ultimately saving application space and costs. The SmartSeal is a rugged connector that is engineered to withstand the demands of the two-wheeler, ATV/UTV, leisure marine, and recreational vehicle markets.

The SmartSeal connector uses TE's new high-performance single piece terminals (TE part numbers 1-2236793-3 & 2291193-3). The contacts feature a single contact beam and accommodate a wide range of wire sizes (0.50-0.75 mm<sup>2</sup> and 0.30-0.35 mm<sup>2</sup>). The new proprietary terminals incorporate an innovative wave structure contact zone, which optimizes current distribution and flow. Due to the terminals' unique wave structure design and spacer actuated pressure, the mating force required to achieve extreme levels of performance is reduced. The design also helps to reduce the surface disruption and wear on the plated PCB contact zones.

The SmartSeal connectors, like the entire TE Industrial & Commercial Transportation product portfolio, deliver reliable connectivity solutions for applications where failure is not an option.

### FEATURES

- Headerless, environmentally sealed PCB connector
- Proprietary single contact beam terminal design for low mating force
- Terminal's wave structure PCB contact zone provides extreme level of performance

## Smartseal Connector

### SmartSeal Connector



1. Crimped Contact Assembly
2. Seal Holder
3. Family Seal
4. Housing / Cavity Block
5. Lever
6. Spacer
7. ECU Assembly (provided by ECU supplier)

### SPECIFICATIONS

#### Mechanical

<b>Operating Force</b>	75 N
<b>Sealing</b>	IP 69K
<b>Dimensions</b>	92 x 79.9 x 26.7 mm

#### Electrical

<b>Current:</b>	5 A
<b>Voltage:</b>	30 V
<b>Insulation Resistance:</b>	100 MΩ min.

### APPLICABLE DOCUMENTS

<b>Product Specification</b>	108-94467-1 for housing	<b>Application Specification</b>	114-94315 for terminals
	108-94449 for terminals		

### ORDERING INFORMATION

Description	Part Number
SmartSeal, 44 way, pressure spring receptacle housing	2305186-1
Receptacle contact, pressure spring, [0.30-0.35mm <sup>2</sup> ], [1.40-1.90] ins., silver	2291193-3
Receptacle contact, pressure spring, [0.50-0.75mm <sup>2</sup> ], [1.40-1.90] ins., silver	1-2236793-3
Blind plug, black	2289990-1
OCEAN applicator, side feed (see drawing for -1/2/5/6/7 applicator types)	2266499-*
Hand crimp tool and die set assembly	8-1579024-0
Extraction tool, contact removal	3-1579028-0
Extraction tool, spacer removal	2-1579028-9

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#### PRODUCT SHEET

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