# ValuSeal

# Wire-to-Wire Connector System

Achieve industry-leading cost efficiencies plus IP65 sealing protection with the innovative, one-piece ValuSeal Wire-to-Wire Connector, ideal for consumer, non-automotive transportation and industrial applications

# **Features and Advantages**

# Integrated wire strain-relief in the connector body

Prevents over-bending and wire failure at the connector body. Eliminates leak-paths often found in other connector systems

## Crimp-and-poke insertion

Simplifies wire assembly for added cost efficiency. Eliminates the need for manual terminal orientation



# 2-and 4-circuit versions available

# Offers design flexibility

#### Positive latch

Ensures proper mating and high retention force between the plug and receptacle

# molex

# IP65-rated, integrated wire-and-ring seal (for wire types: 16 AWG UL1061, 18 AWG UL1007, 18 AWG UL1095)

Eliminates ingress of dust and protects against low-pressure jets of water from all directions. Operates in harsh, wet environments. Creates design and cost efficiencies

## Compact 4.00mm pitch

Enhances design flexibility in applications where space is severely limited

## One-piece housing design

Simplifies assembly process to create cost savings. Boosts efficiency by reducing number of components







Prevent water ingress via unused circuits

# **Applications**

# **Consumer Appliances**

Washers

Refrigerators

**HVAC** Equipment

# **Commercial Vehicle**

## (Non-Automotive Transportation)

ATV / Motorcycles / Watercraft Marine; Under Dash Wiring, Engines Forklifts, Trucks, Trailers, Buses

Aviation

RVs

## Industrial

**Robotics** 

Industrial Machines and Motors

Food Processing Equipment/Plants

Industrial Controls

## Medical

Disposable Equipment

In-Room / Patient Monitoring

Equipment

# **Others**

**Outdoor Lighting** 

**Smart Metering** 

Lawn and Garden Tractors



Marine



Home Appliance



**HVAC** Equipment



Tractors

# **ValuSeal** Wire-to-Wire Connector System



# **Specifications**

# REFERENCE INFORMATION

Packaging: Bulk/Tray UL File No.: E29179 Designed In: Millimeters

RoHS: Yes Halogen Free: No Glow Wire Compliant: No NEMA Rating: IP65 (for wire types: 16 AWG UL1061, 16 AWG UL1007, 18 AWG UL1007, 18 AWG UL1095)

## **MECHANICAL**

Contact Insertion Force (max.): 45N Contact Retention to Housing (min.): 35N

Mating Force (max.): 50N Unmating Force (min.): 14N Durability (max.): 25 cycles

## **ELECTRICAL**

Voltage (max.): 750V Current (max.): 11.5A

(2-Circuit Version with 16 AWG Wire) Contact Resistance: 10 milliohms

Insulation Resistance (min.): 1000 Megohms Dielectric Withstanding Voltage: 1500V AC Wire Gauge Range: 16 to 18 AWG

# **PHYSICAL**

Housing: Polypropylene Contact: Copper (Cu) Alloy

Plating:

Contact Area — Tin

Operating Temperature: -40 to +85°C

# **Ordering Information**

Series No.	Component	Gender	Circuit Size	Wire Gauge
172877	Housing	Male	2 (1x2) and 4 (2x2)	
172878		Female		
173041	Terminal	Male		16 to 18 AWG
173042		Female		
173061	Cavity Plug	Used in Plug and Receptacle	All	

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