

IPT-HD POWER BOLT HIGH-VOLTAGE CONNECTORS

Increase Connector EMC Performance
and Assembly Efficiency

BENEFITS

ENHANCED EMC PERFORMANCE

- Low-contact resistance shielding
- Handles excessive engine-level vibrations
- IP67, IP68 and IP6K9K sealing rated

INCREASED ASSEMBLY EFFICIENCY

- Flexible assembly with single wiring harness
- Quick, easy machining of mounting holes

BROADER RANGE OF APPLICATIONS

- 50/70/95 mm² conductor cross-sections
- ISO Compliant/LV216
- MCU, E-axle, and E-motor applications

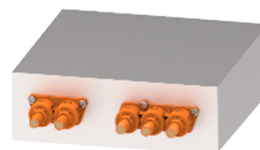
With the global drive to protect the environment and conserve energy, alternatives to fossil fuel are spearheading the demand for advanced, alternative energy vehicles. After years of development, manufacturers are continuously looking for ways to ensure the quality and safety of hybrid and electric vehicles – especially for vibration and shielding performance.

With a new shielding design, easy mounting holes, and flexible assembly connectivity, TE Connectivity's (TE) new IPT-HD power bolt series meets the need! Complying with ISO and LV standards the new IPT-HD power bolt high-voltage connector offers a new shielding design, providing low-contact resistance and thicker options for conductor cross-sections used in MCU (Motor Control Unit), E-axle, and E-motor applications for renewable energy vehicles operating in demanding environments.

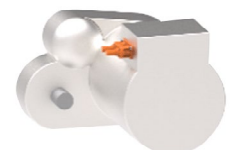
Providing low-contact resistance – even after the vibration – with 1-, 2- and 3-position, IPT-HD power bolt connector can be used in environments exposed to extreme temperatures (-40°C to +125°C) and excessively high engine-level vibrations.



E-motor



MCU

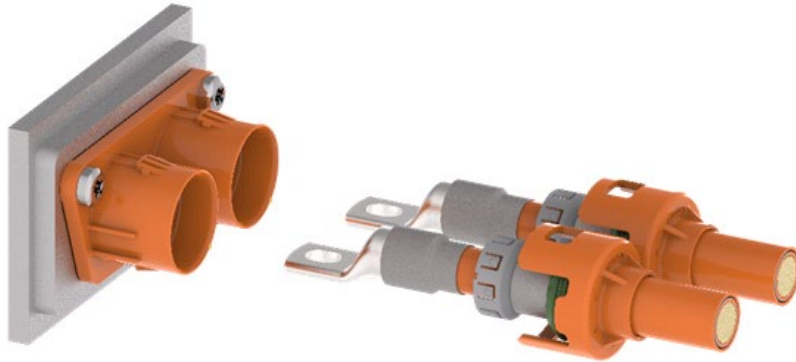


E-axle

With an ever-increasing demand for low-contact resistance and flexible assembly options for a wide range of diverse applications, the IPT-HD power bolt high-voltage connector comes in 50 mm² and 70 mm² conductor cross-sections, with a 95 mm² option available soon. In addition to the traditional integral wiring harness assembly and an easy machining process for mounting holes, the IPT-HD power bolt high-voltage connector provides a separate, single wiring harness for increased assembly flexibility.




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The IPT-HD power bolt high-voltage connectors are widely used for a range of applications in demanding, high-current, high-vibration environments, such as bus, truck, agricultural, construction, and passenger vehicles.

PART NUMBERS

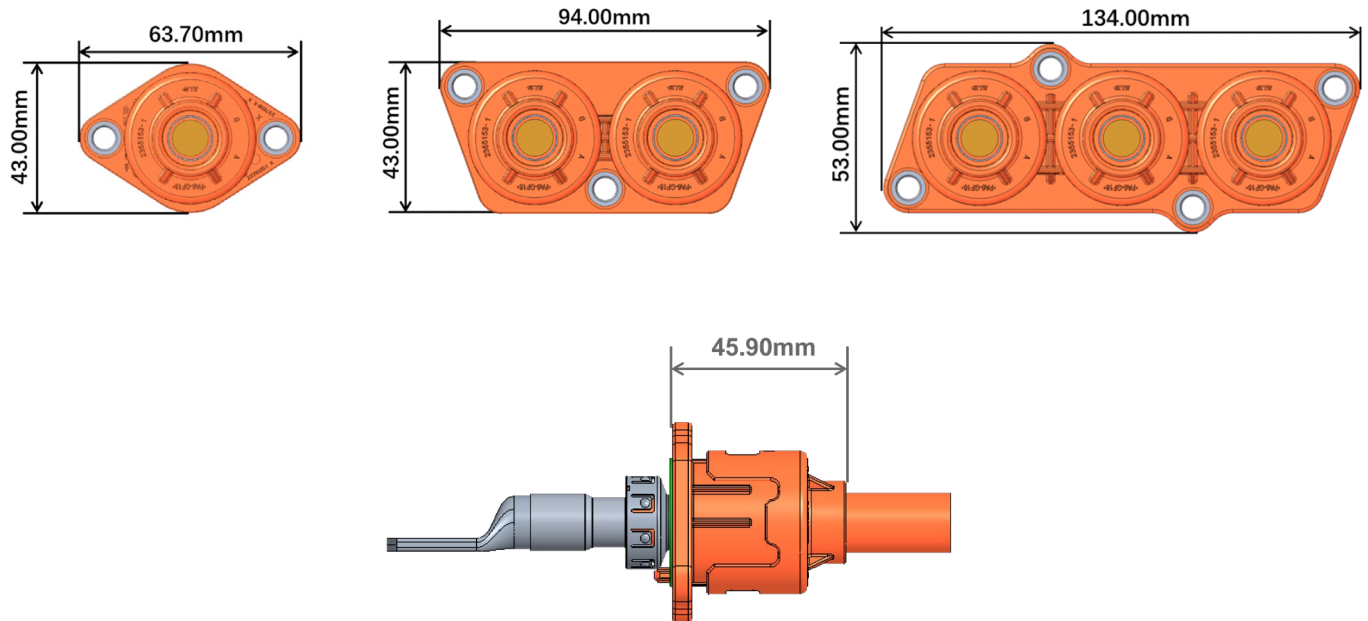
IPT-HD Power Bolt Connector Housing					Cable Assembly Components					
Cavity	Picture	With Shipping Cap	Without Shipping Cap	Quantity Per Application	50 mm ² Applications		Quantity Per Application	70 mm ² Applications		Quantity Per Application
3		2355146-1	2355146-2	1	Kits with all components below	2386463-1	3	Kits with all components below	2386463-2	3
					Shielding	2355150-4	3	Shielding	2355150-2	3
					Shielding Sleeve	2355148-2	3	Shielding Sleeve	2355148-1	3
					Single Wire Seal	2355151-2	3	Single Wire Seal	2355151-1	3
					Seal Cover	2355153-2	3	Seal Cover	2355153-1	3
					Ring Tongue Terminal	3-2177380-1	3	Ring Tongue Terminal	2365737-1	3
2		2371017-1	2371017-2	1	Kits with all components below	2386463-1	2	Kits with all components below	2386463-2	2
					Shielding	2355150-4	2	Shielding	2355150-2	2
					Shielding Sleeve	2355148-2	2	Shielding Sleeve	2355148-1	2
					Single Wire Seal	2355151-2	2	Single Wire Seal	2355151-1	2
					Seal Cover	2355153-2	2	Seal Cover	2355153-1	2
					Ring Tongue Terminal	3-2177380-1	2	Ring Tongue Terminal	2365737-1	2
1		2371019-1	2371019-2	1	Kits with all components below	2386463-1	1	Kits with all components below	2386463-2	1
					Shielding	2355150-4	1	Shielding	2355150-2	1
					Shielding Sleeve	2355148-2	1	Shielding Sleeve	2355148-1	1
					Single Wire Seal	2355151-2	1	Single Wire Seal	2355151-1	1
					Seal Cover	2355153-2	1	Seal Cover	2355153-1	1
					Ring Tongue Terminal	3-2177380-1	1	Ring Tongue Terminal	2365737-1	1

95 mm² and ISO cable components are in development (to be launched in 2022).

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DIMENSIONS



SPECIFICATIONS

Operating Temperature

- -40°C - +125°C

Voltage Range

- 1000V

Conductor Cross-sections

- 50/70/95 mm²

Current Carrying Capacity

- 250A/300A @85°C

Vibration Level

- ISO 16750-3/LV214-S4/USCAR V3

Fire Classification

- UL94-V0

Shielding

- 360° with low contact resistance

IP Rating

- IP67, IP68, IP6K9K

Product Specification

- 108-160140

Application Specification

- 114-160083

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