



HDC FLOATING CHARGE CONNECTOR FOR AGV CHARGE

TE Connectivity (TE) Heavy Duty Connectors (HDC) now offering the HDC Floating Charge Connector for Warehouse Automation application. This charging connectors innovative technology has excellent capability, with up to 30,000 mating cycles to provide a highly reliable solution. Its clever floating system helps enable Autonomously Guided Vehicles (AGV) to automatically correct mating positions.

Additionally, its compact design with hybrid power and signal helps enable the miniaturization of vehicles.

TE HDC floating charge connector focus on providing your AGV / Autonomous Mobile Robot (AMR) a higher efficiency, more reliable and size reduced solution.

BENEFIT

- The size reduced design of AGV with compact hybrid system
- Improving power distribution capabilities with low temperature rise
- High reliability performance with high mating cycles
- Floating correction guides with 0.5mm tolerance
- Safety operation with finger protection: Protect error finger touch for safety operation in field

KEY FEATURES

- Hybrid design:
Power: 80A/250V *2pins
Signal: 10A /60V *4pins
- Mating cycles: $\geq 30,000$ cycles
- Floating design with 0.5 mm tolerance
- finger protection

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APPLICATIONS

- Warehouse Automation
- AGV/AMR

ELECTRICAL

- Power: 80A/250V
- Signal: 10A/60V
- Rated impulse voltage:
 - Power: 4.0KV
 - Signal: 1.5KV
 - Pollution degree: 3
- Wire range:
 - Power: 10-16mm² (8-6AWG)
 - Signal: 0.14-2.5mm² (26-14AWG)
 - Contact type: crimp contact

MECHANICAL

- Acc. to EN 61984 Connectors
- Safety requirements and tests
- Mating cycles: 30000 cycles

STANDARDS

- EN 61984: connectors - safety requirements and tests
- IEC 60068: environmental testing
- IEC 60512: connectors for electronic equipment - test and measurements
- IEC 60529: degrees of protection provided by enclosures (IP Code)
- IEC 60664-1: insulation coordination for equipment within low-voltage systems (Part 1)
- EN 61373: railway application - rolling stock equipment - shock and vibration test
- ISO 6988: metallic and other non-organic coatings - sulfur dioxide test with general condensation of moisture

SPECIFICATIONS

- [108-137613](#)
- [114-137613](#)

CERTIFICATION

- UL 1977
- TUV
- CE
- RoHS

PART NUMBERS

Type	Part Number	Part Description
Male insert	T2120062101-001	HK2/4-006-M
Female insert	T2120062201-001	HK2/4-006-F
Power contact (Male)	T2400031100-002	HSM-10 with cap(10 sq mm)
	T2400031160-002	HSM-16 with cap(16 sq mm)
Power contact (Female)	T2400032100-002	HSF-10(10 sq mm),high mating cycles
	T2400032160-002	HSF-16(16 sq mm),high mating cycles
Signal contact (Male)	T2030031002-000	HEM-0.3,L=28
	T2030031005-000	HEM-0.5,L=28
	T2030031008-000	HEM-0.75,L=28
	T2030031010-000	HEM-1.0,L=28
	T2030031015-000	HEM-1.5,L=28
	T2030031025-000	HEM-2.5,L=28
	T2030031030-000	HEM-3.0,L=28
	T2030031040-000	HEM-4.0,L=28

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Type	Part Number	Part Description
Signal contact (Female)	<u>T2030032002-000</u>	HEF-0.3
	<u>T2030032005-000</u>	HEF-0.5
	<u>T2030032008-000</u>	HEF-0.75
	<u>T2030032010-000</u>	HEF-1.0
	<u>T2030032015-000</u>	HEF-1.5
	<u>T2030032025-000</u>	HEF-2.5
	<u>T2030032030-000</u>	HEF-3.0
	<u>T2030032040-000</u>	HEF-4.0

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