

Amphenol®



HELIOS H4

Industrial Operations (AIO) offers products and solutions for all segments of the solar electric system. AIO understands the need for efficient (low loss) power transfer, highly reliable, and cost effective solutions that are required to be competitive in this industry. We can provide panel manufacturers, installers, and OEM's with connectivity products for both thin film and crystalline silicon technologies. Amphenol® has a broad range of technologies to help minimize the cost of inverters and power conditioners. Amphenol® Industrial can help you power the planet with the sun. The Helios H4 connector is just one of the solar connector solutions Amphenol® Industrial has to offer.

H4 Features:

- UL and TÜV dual approval
- Fully intermateable with industry standard
- Meets all new NEC 2008 requirements
- Quick and easy secure snap lock mating
- Simple unlocking tool meets NEC requirements
- Long-term UV and Ozone resistance
- Highest current rating in industry
- RoHS compliant
- Complete Cable Assemblies available
- Low contact resistance means low power loss
- Ready for field assembly

Helios H4

Amphenol solar connector

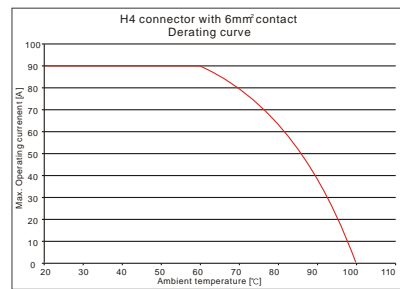
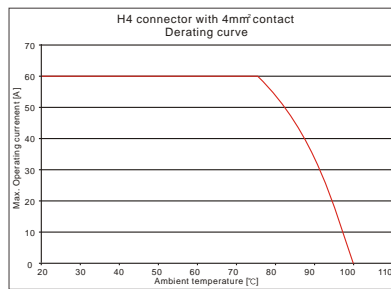
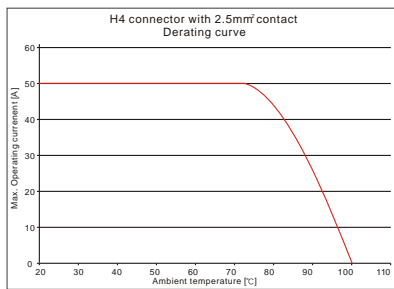


RADSOK® Contact

| Technical Data | |
|----------------------------|---|
| Rated current | 36A(2.5mm ² ,AWG14),45A(4.0mm ² ,AWG12),52A(6.0mm ² ,AWG10),60A(10.0mm ² ,AWG8) |
| Rated voltage | 1000V (IEC/CEI), 600V(UL) |
| Test voltage | 6kV for 1 minute, 10kV impulse (1.2/50µS)(IEC) |
| Typical contact resistance | 0.25mΩ |
| Contact material | Copper, tin plated |
| Contact system | Machined/cold formed contact with Radsok® insert |
| Insulation material | PC |
| Locking mechanism | Snap-lock, special unlock tool required to un-mate as required by NEC2008 |
| Cable strain relief | Compression gland with ratcheting gland nut |
| Degree of protection | IP68 (1 meter, 1 hour) mated |
| Safety class | II (IEC61140) |
| Pollution degree | 2 (IEC60664) |
| Overvoltage category | III (IEC60664) |
| Flame class | UL94-V0 |
| Ambient temperature range | -40°C --- +90°C |



Derating curves



How to order

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | | | | |
|-------------------|--------------------|---------|------------------|--------|---------------------|------------|--------------|---------|----------------------------|---|---------------|---|---|--|
| H | 4 | C | F | C | 2 | D | I | | | | | | | |
| Product line | Product type | Product | | Gender | Cable entry | Cable size | Approval | Package | Variation | | | | | |
| Helios solar line | H4 solar connector | C | Connector | F | Female + (standard) | C | cable gland | 2 | 2.5 mm ² /AWG14 | T | TUV approved | I | Single | |
| | | P | Protective cap | M | Male - (standard) | M | bulkhead M12 | 4 | 4.0mm ² /AWG12 | U | UL approved | C | Bulkpack, 100 purchase | |
| | | Y | Branch connector | P | mated pair | N | bulkhead M14 | 6 | 6.0mm ² /AWG10 | D | dual approval | D | Bulk pack, 500 purchase. | |
| | | | | G | female - | O | over-mold | 8 | 10.0mm ² /AWG8 | | | M | Bulk pack, 1000 purchase. | |
| | | | | N | male + | | | | | | | N | Bulk pack, 2000 purchase. (default package) | |

How to order assembly tools

| Description | Ordering code |
|-----------------------------|---------------|
| H4 Strip tool | H4TS0000 |
| H4 Crimp Tool | H4TC0000 |
| H4 Wrench Tool | H4TW0000 |
| H4 Ring Tool | H4TR0000 |
| H4 Universal Unlocking Tool | H4TU0000 |

Tooling part numbers



Crimp tool for 2,5SQMM-6SQMM (AWG10-AWG14)



Universal unlocking tool



Unlocking ring tool



Wrench/disconnect/assembly tool



Strip tool for 2,5SQMM-6SQMM (AWG10-AWG14)

For further information on your individual application requirements, contact: Amphenol Corporation

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