HPS40-E 4+2

Unleash Power, Charge Efficiency: Your 3-Phase Connection Solution



EFFICIENT CONNECTION FOR ALL ON-BOARD CHARGERS

With a legacy of years of expertise, we proudly present our HIRSCHMANN AUTOMOTIVE PowerStar eLine – an epitome of innovation in high voltage connectors.

Experience ergonomic design, effortless processing, and unmatched efficiency, all shaping the future of eMobility. Elevate your connection with the seamless connectivity of the HPS eLine.

The HPS40-E 4+2 connector system is your go-to solution for on-board charger connections. Designed for efficiency and watertight reliability, it excels even in high temperatures, ensuring safe and secure operations. Welcome to innovation and dependability in one seamless package.



Characteristics:

- compliant with several automotive test specifications
- watertight according to IP6K9K
- easy assembling
- integrated interlock
- 360° shielded connection
- low shield contact resistance
- high current load at high ambient temperatures
- robust design

The HCT4 contact system is an in-house development by Hirschmann Automotive. Device connections can be implemented in different variants on request.

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
APPLICATIONS	3-phase charging
NUMBER OF PINS	4 (high voltage) + 2 (HVIL optional)
OPERATING CONDITIONS	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < Ueff ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +125° C
MAXIMUM ALTITUDE	5,000 m
MAXIMUM CURRENT LOAD	55 A at 80° C (4 x 6.0 mm ²)
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
EMC PERFORMANCE (6.0 MM ²)	until 2 MHz < 2.5 mΩ/m until 30 MHz < 5 mΩ/m > 65 dB (30 MHz to 300 MHz)
SHIELDED AREA	360° circumferential
SHIELD CONTACT RESISTANCE	$<$ 2.0 m Ω (total from sheathed cable until aggregate housing)
VIBRATION STRENGTH 2	according to LV214/215 - PG17 (first fixation point < 200 mm)
MATING/UNMATING FORCE	< 54 N
SECONDARY LOCK SYSTEM	activating force < 40 N, no unintentional opening possible
KOSHIRI SAFETY	yes
POLARIZATION/CODING	incorrect insertion force > 200 N
CPA SYSTEM	operating force < 30 N
HVIL SYSTEM	minimum 1.0 mm, leading

CONTACT SYSTEM INFORMATION

CONTACT SYSTEM	HCT4 (4.0 mm round terminal), Ag, crimped
MATERIAL/SURFACE	Cu-Leg., CuNiSi, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER-SPECIFIC INFORMATION

CABLE CROSS SECTION	2.5 mm², 4.0 mm², 6.0 mm²
CONTACT CARRIER CODINGS	A

HPS40-E 4+2 PRODUCT VARIANTS

FEMALE	180° MALE
SINGLECORE CONNECTION	CABLE CONNECTION

Customer specific connection variants on request.

SEEKING MORE DETAILED INFORMATION? SCAN ME AND BROWSE THROUGH THE PRODUCT CATALOG.



Daniel Engstler is your Contact for Individual Questions

Global Product Manager High Voltage



- 🖄 +43 664 780 464 73
- Ce daniel.engstler@hirschmann-automotive.com



www.hirschmann-automotive.com shop.hirschmann-automotive.com



3/2025 Subject to change. All rights reserved by Hirschmann Automotive GmbH.