

HPS40 4+2

Maximum Reliability at High Current Load
and High Temperatures



HIRSCHMANN
AUTOMOTIVE

CONNECTION TECHNOLOGY FOR ALL ON-BOARD CHARGERS AVAILABLE ON THE MARKET.

The HIRSCHMANN AUTOMOTIVE PowerStar 40 4+2 connection system is shielded and sealed. It is designed for all high-voltage on-board chargers available on the market that are used in electric vehicles. Needless to say, the high-voltage connectors comply with the global standards of the automotive industry.

The products not only impress with their optimized design and low weight. Their operating flexibility is also hard to beat. As the smallest connection system available in this segment, it guarantees optimum performance and top processing.



Characteristics:

- compliant with several automotive test specifications
- watertight according to IP6K9K
- high current load at high ambient temperatures
- 360° shielded connection
- compact design
- low shielded transition resistance
- simple installation

A wide variety of device connections can be implemented 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 < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	53 A at 80° C (4 x 6.0 mm ²), see deratings product specification
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 mΩ (total from sheathed cable until aggregate housing)
VIBRATION STRENGTH 2	according to LV214/215 - PG17 (first fixation point < 200 mm)
MATING/UNMATING FORCE	< 75 N
SECONDARY LOCK SYSTEM	activating force < 40 N, no unintentional opening possible
KOSHIRI SAFETY	yes
POLARIZATION/CODING	incorrect insertion force > 225 N
CPA SYSTEM	operating force < 30 N
HVIL SYSTEM	minimum 1.0 mm (nominal 2.0 mm), leading

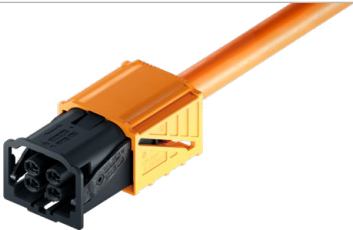


CONTACT SYSTEM INFORMATION

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	4.0 mm ² , 6.0 mm ² as MCC solution with different pole numbers
CONTACT CARRIER CODINGS	A, B, Z

HPS40 4+2 PRODUCT VARIANTS

FEMALE	180° MALE
MULTICORE CONNECTION	CABLE CONNECTION
	
	BLADE CONNECTION
	
Customer specific connection variants on request.	



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for Individual Questions**

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



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