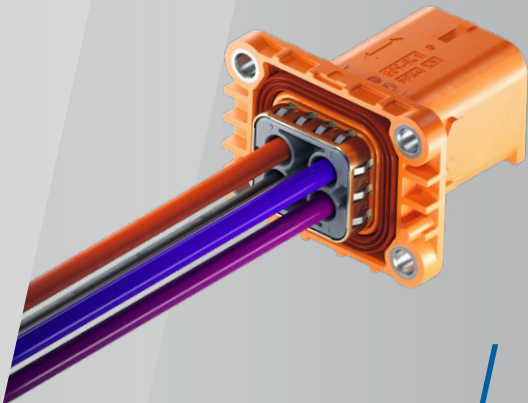


# HPS40 4+2 UNSHIELDED

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 unshielded connection system is unshielded and sealed. It is designed for all high-voltage onboard 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
- unshielded connector system
- compact design
- 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 <sub>eff</sub> ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	5,600 m
MAXIMUM CURRENT LOAD	50 A at 80° C (4 x 6.0 mm <sup>2</sup> ), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
SHIELDED AREA	unshielded
VIBRATION STRENGTH 2	according to LV214/215 - PG17 (without fixation point)
VIBRATION STRENGTH 3	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	6.0mm <sup>2</sup> as MCC solution with different pole numbers
CONTACT CARRIER CODINGS	A

## HPS40 4+2 UNSHIELDED 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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