

# EFFICIENT CONNECTION FOR ALL AUXILIARY UNITS

In cooperation with well-known OEMs, Hirschmann Automotive developed a future-oriented system:

The HIRSCHMANN AUTOMOTIVE PowerStar high-voltage connectors. The innovative solutions fulfill highest quality requirements and comply with global automotive standards.

The HPS40-2 2+2 is particularly impressive due to it's optimized design and low weight. The connector is watertight and fully efficient even at high temperatures – thus ensuring safe operation even under harsh environmental conditions. The system is easy to assemble, have an integrated interlock and a circumferential shield transition for secure connection and disconnection.



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#### 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. Multiple connections with optimized installation space are also possible.

## TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
APPLICATIONS	auxiliary units
NUMBER OF PINS	2 (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 +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	64 A at 80° C (6.0 mm²), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
EMC PERFORMANCE (6.0 MM²)	until 30 MHz < 1 m $\Omega$ /m > 75 dB (10 kHz to 500 MHz) > 65 dB (500 MHz to 1,000 MHz)
SHIELDED AREA	360° circumferential
SHIELD CONTACT RESISTANCE	$<$ 2,0 $\text{m}\Omega$ (total from sheathed cable until aggregate housing)
VIBRATION STRENGTH 2	according to LV214/215 - PG17 (without fixation point)
VIBRATION STRENGTH 3	according to LV214/215 - PG17 (first fixation point at < 200 mm)
VIBRATION STRENGTH 4	according to LV214/215 - PG17 (first fixation point at < 50 mm)
MATING/UNMATING FORCE	< 65 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 (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 2.5 mm<sup>2</sup>, 4.0 mm<sup>2</sup>, 6.0 mm<sup>2</sup> as MCC and SCC solutions

CONTACT CARRIER CODINGS A, B, C, D, Z

# HPS40-2 2+2 PRODUCT VARIANTS



Customer-specific connection variants on request.













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



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