# HPS40-2 PLUS

Highest Reliability with High Current Load and High Temperature



### 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 PLUS 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 and was developed with the extended IP-degree of protection IPXXB+.



#### Characteristics:

- compliant with several automotive test specifications
- watertight according to IP6K9K
- easy assembling
- IP-degree of protection IPXXB+
- 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)
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	5,500 m at 3,200 VDC
MAXIMUM CURRENT LOAD	60 A at 80° C (6.0 mm <sup>2</sup> ), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXB+ UL (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
EMC PERFORMANCE (6.0 MM <sup>2</sup> )	until 30 MHz < 1 mΩ/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 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

#### 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 <sup>2</sup> , 6.0mm <sup>2</sup> as MCC solution
CONTACT CARRIER CODINGS	A, B, C, D, Z

### HPS40-2 PLUS PRODUCT VARIANTS



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

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