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 ²), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXB+ (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
EMC PERFORMANCE (6.0 MM ²)	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 Ω (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

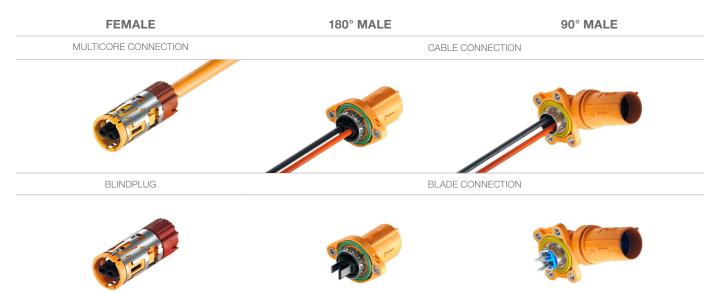
CONTACT SYSTEM INFORMATION

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 ² , 6.0mm ² as MCC solution
CONTACT CARRIER CODINGS	A, B, C, D, Z

HPS40-2 PLUS PRODUCT VARIANTS



Customer-specific connection variants on request.



Tobias Natter is your Contact for Individual Questions

Global Product Manager High Voltage

+43 5522 307 1839

<u>*</u> +43 664 889 317 73

Ce tobias.natter@hirschmann-automotive.com

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



Hirschmann Automotive GmbH Oberer Paspelsweg 6–8 6830 Rankweil, Austria

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



9/2022 Subject to change. All rights reserved by Hirschmann Automotive GmbH.