

## HPS40-1 2+2

Highest Reliability with High Current Load  
and High Temperature



HIRSCHMANN  
AUTOMOTIVE

# 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 HIRSCHMANN AUTOMOTIVE PowerStar 40-1 is particularly impressive due to its 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.



## Characteristics:

- compliant with test specification LV 214
- watertight according to IP6K9K
- mountability
- integrated interlock
- 360° shielded connection
- interface “connector-to-shield” with low electrical resistance
- high current load at high ambient temperatures
- robust design

## TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
APPLICATIONS	auxiliary units
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional) or 3 (high voltage) + 2 (HVIL optional)
OPERATING CONDITIONS	750 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	62 A at 80° C (6.0 mm <sup>2</sup> ), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
EMC PERFORMANCE (6.0 MM <sup>2</sup> )	> 70 dB (10 kHz to 500 MHz) > 65 dB (5 MHz to 500 MHz)
SHIELDED AREA	360° circumferential
SHIELD CONTACT RESISTANCE	< 10 mΩ (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 < 100 mm)
MATING/UNMATING FORCE	< 85 N
SECONDARY LOCK SYSTEM	activating force < 40 N, no unintentional opening possible
KOSHIRI SAFETY	yes
POLARIZATION/CODING	incorrect insertion force > 300 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 or Kostal LKS (1.5 mm terminal for 3+2 variant)
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> , 6.0mm <sup>2</sup> as MCC solution and 3.0 mm <sup>2</sup> , 5.0 mm <sup>2</sup> as SCC solution
CONTACT CARRIER CODINGS	A, B, C, Z

## HPS40-1 2+2 PRODUCT VARIANTS

### FEMALE

MULTICORE CONNECTION



### 180° MALE



### 90° MALE

CABLE CONNECTION



SINGLECORE CONNECTION



CABLE CONNECTION 3+2



BLINDPLUG



MULTIPLE CONNECTION 3+2



Customer-specific connection variants on request.


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



**Elisa-Maria Jussel is your  
Contact for Individual Questions**

Technical Sales

 +43 5522 307 1184

 +43 664 884 564 87

 elisa-maria.jussel@hirschmann-automotive.com



**Hirschmann Automotive GmbH**

Oberer Paspelsweg 6–8  
6830 Rankweil, Austria

[www.hirschmann-automotive.com](http://www.hirschmann-automotive.com)  
[shop.hirschmann-automotive.com](http://shop.hirschmann-automotive.com)



7/2024 Subject to change. All rights reserved by Hirschmann Automotive GmbH.