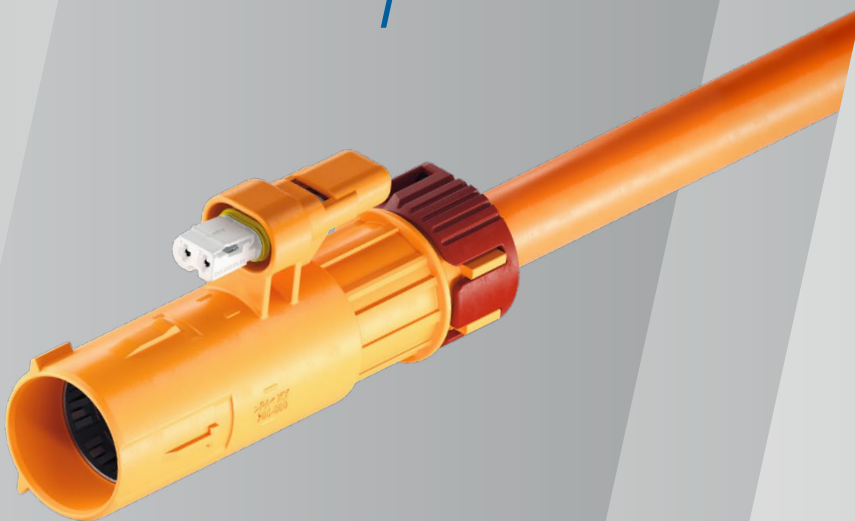


# HPS In-Line Connector

Maximum Reliability at High Current Load  
and High Temperatures



HIRSCHMANN  
AUTOMOTIVE

# SAFE SEPARATING POINT THAT ENABLES THE FLEXIBLE DESIGN OF IN-VEHICLE HIGH-VOLTAGE ELECTRICAL SYSTEMS

The shielded and sealed HIRSCHMANN AUTOMOTIVE PowerStar In-Line Connector offers an optimal separating point. Its compact design enables top installation conditions.

Optionally, the connection system is also available with interlock. The product series complies with all global standards and norms of the automotive industry.



## Characteristics:

- compliant with several automotive test specifications
- watertight according to IP6K9K
- high current load at high ambient temperatures
- 360° shielded connection
- compact design
- low shielded transition resistance
- simple installation

## TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
APPLICATIONS	inline connection
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	59 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> )	until 30 MHz < 5 mΩ/m > 75 dB (10 kHz to 500 MHz) > 75 dB (500 MHz to 1,000 MHz)
SHIELDED AREA	360° circumferential
SHIELD CONTACT RESISTANCE	< 2,0 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 < 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

## HPS IN-LINE CONNECTOR PRODUCT VARIANTS

### FEMALE

### MALE WITH HVIL

### MALE WITHOUT HVIL

MULTICORE CONNECTION



SINGLECORE CONNECTION




When using the variant without HVIL, the female connector is the HPS40-2 2+2 without the HVIL housing.



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



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