

HIGH VOLTAGE APPLICATIONS

Product Catalogue



HIRSCHMANN
AUTOMOTIVE

Index

06 ABOUT US

09 HPS40-1 2+2

10	HPS40-1 2+2 FEMALE CONNECTOR MCC
12	HPS40-1 2+2 FEMALE CONNECTOR SCC
14	HPS40-1 2+2 FEMALE CONNECTOR MCC WITH CPA
16	HPS40-1 2+2 FEMALE CONNECTOR SCC WITH CPA
18	HPS40-1 2+2 FEMALE CONNECTOR BLIND PLUG
20	HPS40-1 2+2 MALE CONNECTOR 180° WIRE WPT
22	HPS40-1 2+2 MALE CONNECTOR 90° WIRE WPT
24	HPS40-1 2+2 MALE CONNECTOR 124° WIRE WPT
26	HPS40-1 3+2 FEMALE CONNECTOR MCC
28	HPS40-1 3+2 FEMALE CONNECTOR MCC WITH CPA
30	HPS40-1 3+2 MALE CONNECTOR 180° WIRE WPT
32	HPS40-1 3+2 MALE CONNECTOR 90° WIRE WPT

35 HPS40-2 2+2

36	HPS40-2 2+2 FEMALE CONNECTOR MCC
38	HPS40-2 2+2 FEMALE CONNECTOR SCC
40	HPS40-2 2+2 FEMALE CONNECTOR BLIND PLUG
42	HPS40-2 2+2 MALE CONNECTOR 180° WIRE
44	HPS40-2 2+2 MALE CONNECTOR 180° BLADE
46	HPS40-2 2+2 MALE CONNECTOR 180° BUSBAR
48	HPS40-2 2+2 MALE CONNECTOR 180° WIRE DUPLEX
50	HPS40-2 2+2 MALE CONNECTOR 90° WIRE
52	HPS40-2 2+2 MALE CONNECTOR 90° WIRE
54	HPS40-2 2+2 MALE CONNECTOR 90° WIRE
56	HPS40-2 2+2 MALE CONNECTOR 90° BLADE
58	HPS40-2 2+2 FEMALE CONNECTOR NAFTA MCC
60	HPS40-2 2+2 FEMALE CONNECTOR NAFTA SCC
62	HPS40-2 2+2 FEMALE CONNECTOR NAFTA BLIND PLUG

**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
shop.hirschmann-automotive.com

- 64 HPS40-2 PLUS FEMALE CONNECTOR MCC
- 66 HPS40-2 PLUS FEMALE CONNECTOR BLIND PLUG
- 68 HPS40-2 PLUS MALE CONNECTOR 180° WIRE
- 70 HPS40-2 PLUS MALE CONNECTOR 180° BLADE
- 72 HPS40-2 PLUS MALE CONNECTOR 90° WIRE
- 74 HPS40-2 PLUS MALE CONNECTOR 90° WIRE
- 76 HPS40-2 PLUS MALE CONNECTOR 90° BLADE

79 HPS40 4+2

- 80 HPS40 4+2 FEMALE CONNECTOR MCC
- 82 HPS40 4+2 MALE CONNECTOR 180° WIRE
- 84 HPS40 4+2 MALE CONNECTOR 180° BLADE
- 86 HPS40 4+2 MALE CONNECTOR 180° BLADE HP

89 HPS DISTRIBUTOR

- 90 HPS Y-DISTRIBUTOR MCC
- 92 HPS Y-DISTRIBUTOR SCC
- 94 HPS H-DISTRIBUTOR MCC
- 96 HPS H-DISTRIBUTOR SCC

99 HPS IN-LINE CONNECTOR

- 100 HPS IN-LINE CONNECTOR MALE MCC WITH HVIL
- 102 HPS IN-LINE CONNECTOR MALE SCC WITH HVIL
- 104 HPS IN-LINE CONNECTOR MALE MCC WITHOUT HVIL
- 106 HPS IN-LINE CONNECTOR MALE SCC WITHOUT HVIL
- 108 HPS IN-LINE CONNECTOR FEMALE MCC WITH HVIL
- 110 HPS IN-LINE CONNECTOR FEMALE SCC WITH HVIL
- 112 HPS IN-LINE CONNECTOR PLUS MALE MCC

114 GET IN TOUCH



About us






WE CREATE THE MOBILITY OF TOMORROW

For more than 60 years, we have been driving progress in the automotive industry. Our specialty? Connectors, cable assemblies, sensors, and application-specific connectivity solutions. For the current megatrends of eMobility and autonomous driving, we develop systems that set new benchmarks.

The components are developed for applications that withstand the life cycle of the vehicle and extreme environmental requirements. Whether for cars with combustion engines or for electrified vehicles, whether standard products or individual customer solutions – we develop systems that set new standards and support you in making the most of your idea. To fully exploit its potential, the company is digitizing and optimizing the entire value chain.

Under the most extreme conditions, this is our self-conception.

COMPANY KEY FIGURES

 Number of Employees worldwide	7,330
 Plant Locations Production	7
 Competence Centers	5
 Distributor	1
 Founding Year	1959

MOTION AND RELIABILITY: THAT IS OUR DEFINITION OF PROGRESS

A Competent Partner in Every Regard

We regard it as our duty to constantly develop and offer the automotive industry and especially our customers cutting-edge technologies. With professional tools and special machine construction, we create the best conditions for the efficient implementation of new products and special parts.

Quality Comes First

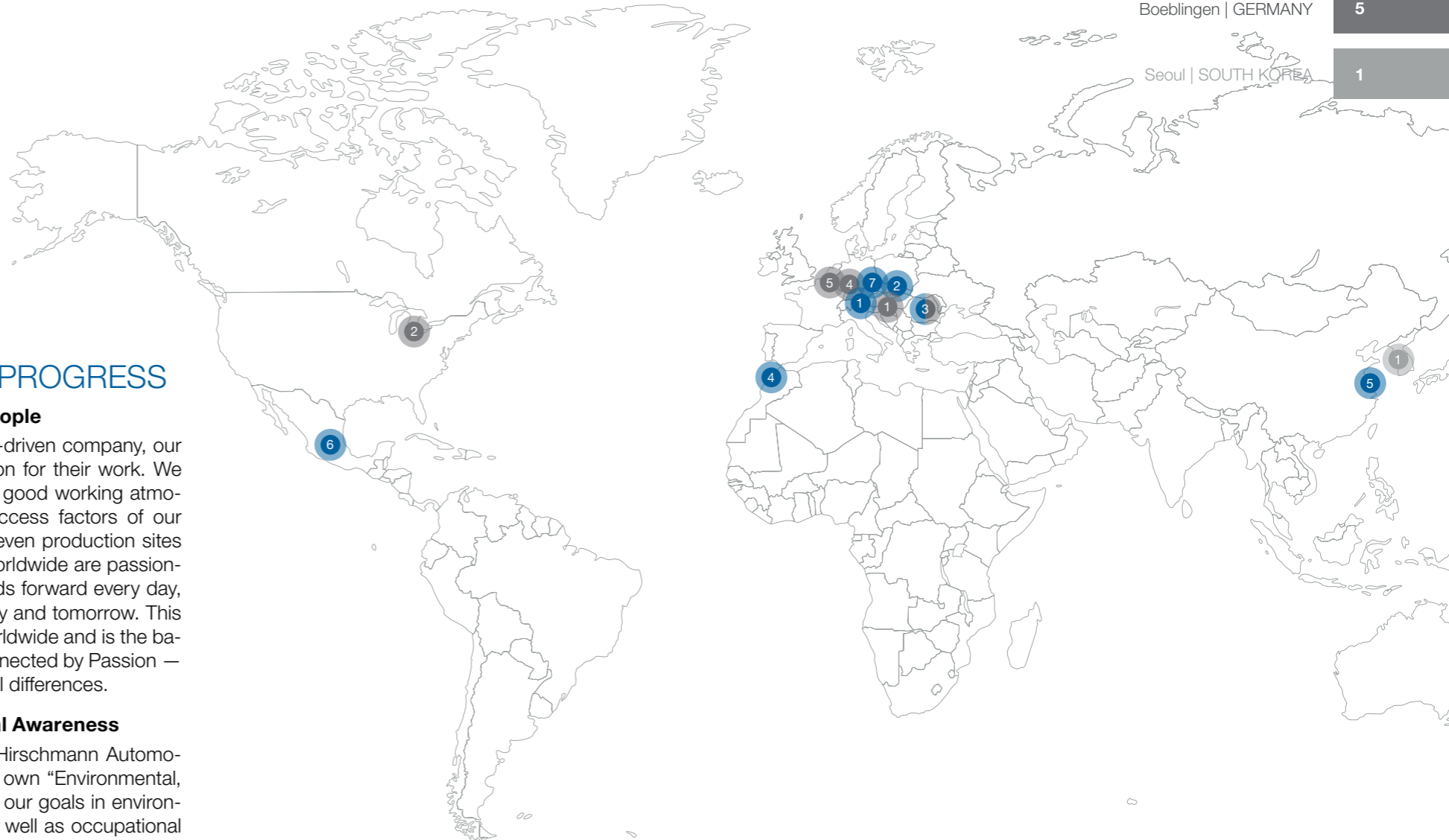
The central measuring and testing laboratory is the guarantor for fully tested components, from the design and construction phase through to series production. With vibration tests, metallography, microscopy, x-rays, tightness, infrared thermal analysis, or environmental impact analyses, you can be ensured that mature and flawless products leave our premises. Laboratory tests complete the extensive and indispensable quality process.

Good Connections Start with People

While we are an entirely technology-driven company, our true core is people and their passion for their work. We believe that good employees and a good working atmosphere are the most important success factors of our time. Around 7,330 employees at seven production sites as well as 5 competence centers worldwide are passionately driving the major industry trends forward every day, actively shaping the mobility of today and tomorrow. This “we” concept connects the sites worldwide and is the basis of our corporate philosophy: Connected by Passion – across borders, oceans, and cultural differences.

Sustainability and Environmental Awareness

The same standard applies to the Hirschmann Automotive Group worldwide, following our own “Environmental, Health & Safety Policy”. It describes our goals in environmental and energy management as well as occupational health and safety.



● PRODUCTION SITE ● COMPETENCE CENTERS ● DISTRIBUTOR

Rankweil AUSTRIA	1
Vsetín CZECH REPUBLIC	2
Târgu Mureș ROMANIA	3
Kenitra MOROCCO	4
Nantong CHINA	5
San Miguel MEXICO	6
Freyung GERMANY	7

Vienna AUSTRIA	1
Detroit USA	2
Târgu Mureș ROMANIA	3
Munich GERMANY	4
Boeblingen GERMANY	5

Seoul SOUTH KOREA	1
---------------------	---



HPS40-1 2+2

INTRODUCTION

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, has an integrated interlock and a circumferential shield transition for secure connection and disconnection.

HPS40-1 2+2 FEMALE CONNECTOR MCC

SYSTEM NUMBER	805-972-...00
GENDER	female
INTERFACE	EMEA
CONNECTION TYPE	multicore cable
PRODUCT SPECIFICATION	EPS-100043
PROCESS SPECIFICATION	EVS-100097
APPLICATIONS	auxiliary units



TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	750 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 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 ²), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
EMC PERFORMANCE (6.0 MM ²)	> 70 dB (10 kHz to 5 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
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

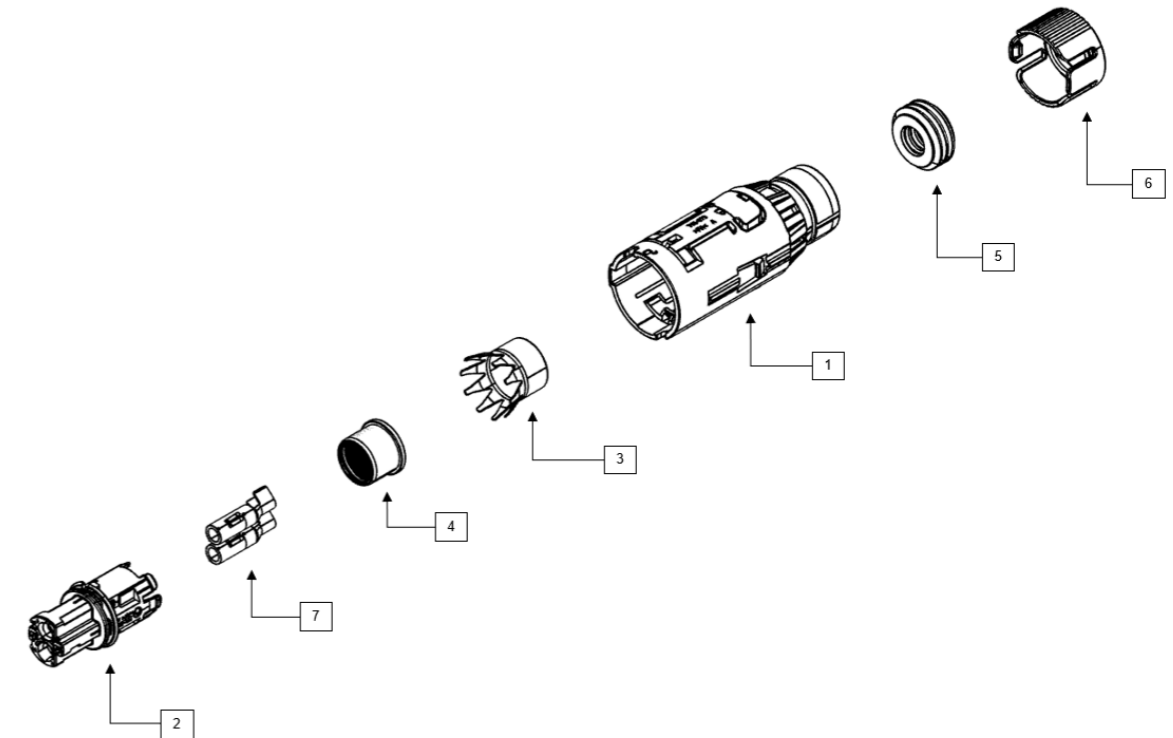
CONTACT SYSTEM	HCT4 (4.0 mm round terminal), Ag, crimped
MATERIAL/SURFACE	Cu-Leg., CuNiSi, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	2.5 mm ² , 4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, Z

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS40-1 LOCKING DEVICE	806-230-515	•	
2	HPS40-1 FEMALE CONTACT CARRIER	806-229-...	•	
3	HPS40-1 SHIELD CRIMP SOCKET	709-115-511	•	
4	HPS40-1 STRESS RELIEF MCC	709-107-...	•	
5	HPS40-1 CABLE SEAL MCC	709-113-...	•	
6	HPS40-1 COVER CAP MCC	705-749-...	•	
7	HCT4 TERMINAL	709-427-...	•	
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

MATING CONNECTOR

HPS40-1 2+2 MALE CONNECTOR

Page 20, 22, 24

HPS40-1 2+2 FEMALE CONNECTOR SCC



SYSTEM NUMBER	805-972-...00
GENDER	female
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100043
PROCESS SPECIFICATION	EVS-100097
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	750 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 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 ²), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
EMC PERFORMANCE (6.0 MM ²)	> 70 dB (10 kHz to 5 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
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

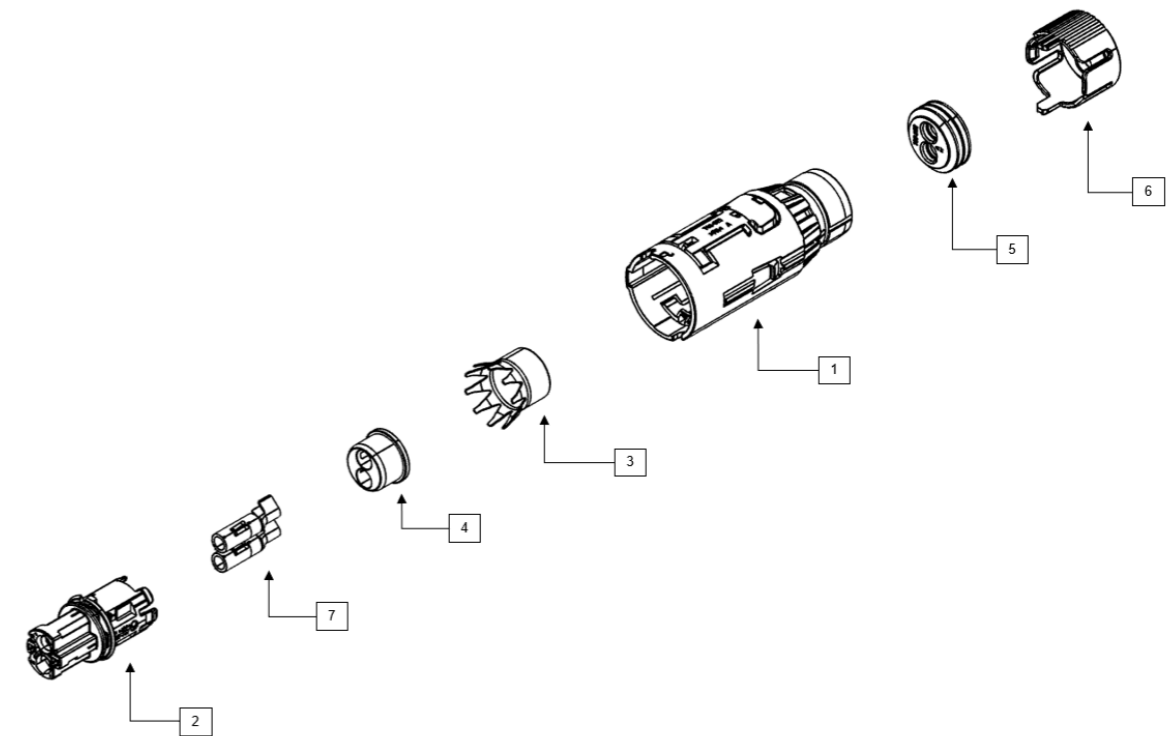
CONTACT SYSTEM	HCT4 (4.0 mm round terminal), Ag, crimped
MATERIAL/SURFACE	Cu-Leg., CuNiSi, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	3.0 mm ² , 5.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, Z

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS40-1 LOCKING DEVICE	806-230-515	•	
2	HPS40-1 FEMALE CONTACT CARRIER	806-229-...	•	
3	HPS40-1 SHIELD CRIMP SOCKET	709-115-511	•	
4	HPS40-1 STRESS RELIEF SCC	709-973-...	•	
5	HPS40-1 CABLE SEAL SCC	709-972-501	•	
6	HPS40-1 COVER CAP SCC	706-541-501	•	
7	HCT4 TERMINAL	709-427-504	•	
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

MATING CONNECTOR

HPS40-1 2+2 MALE CONNECTOR

Page 20, 22, 24

HPS40-1 2+2 FEMALE CONNECTOR MCC WITH CPA



SYSTEM NUMBER	805-972-...00
GENDER	female
INTERFACE	EMEA
CONNECTION TYPE	multicore cable
PRODUCT SPECIFICATION	EPS-100043
PROCESS SPECIFICATION	EVS-100097
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	750 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 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 ²), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
EMC PERFORMANCE (6.0 MM ²)	> 70 dB (10 kHz to 5 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
CPA SYSTEM	operating force < 30 N
HVIL SYSTEM	minimum 1.0 mm (nominal 2.0 mm), leading
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

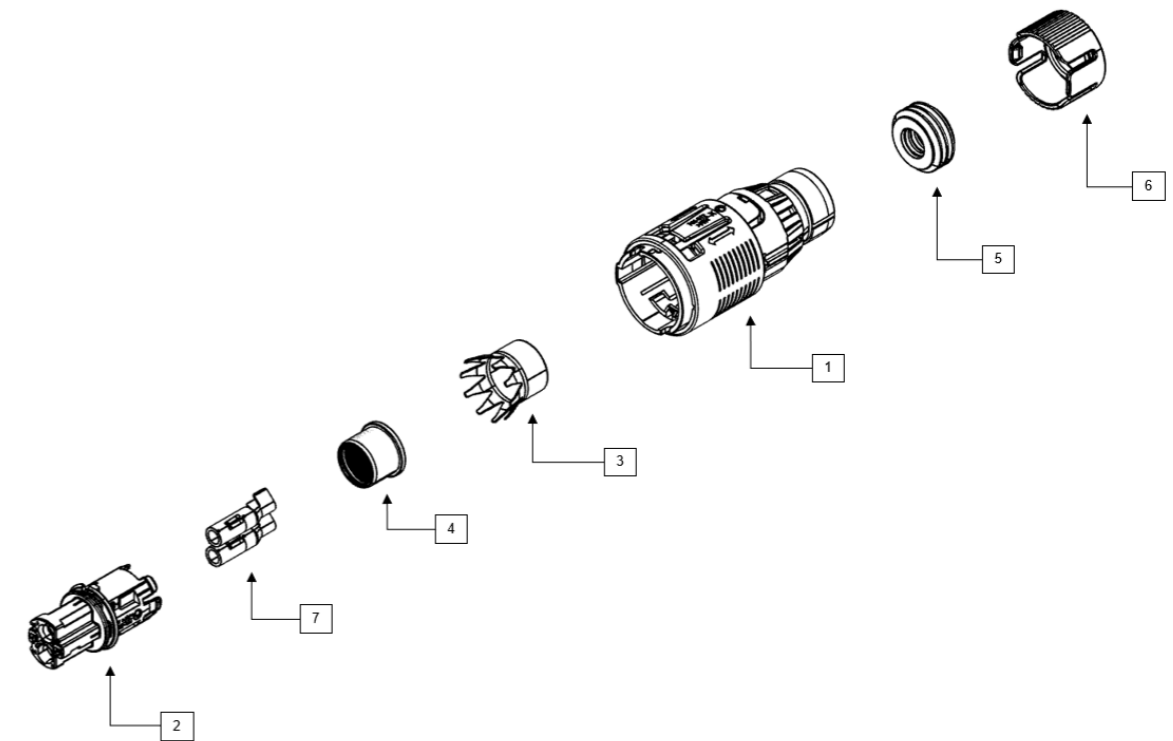
CONTACT SYSTEM	HCT4 (4.0 mm round terminal), Ag, crimped
MATERIAL/SURFACE	Cu-Leg., CuNiSi, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	2.5 mm ² , 4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, Z

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS40-1 LOCKING DEVICE	806-230-516	•	
2	HPS40-1 FEMALE CONTACT CARRIER	806-229-...	•	
3	HPS40-1 SHIELD CRIMP SOCKET	709-115-511	•	
4	HPS40-1 STRESS RELIEF MCC	709-107-...	•	
5	HPS40-1 CABLE SEAL MCC	709-113-...	•	
6	HPS40-1 COVER CAP MCC	705-749-...	•	
7	HCT4 TERMINAL	709-427-...	•	
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

MATING CONNECTOR

HPS40-1 2+2 MALE CONNECTOR

Page 20, 22, 24

HPS40-1 2+2 FEMALE CONNECTOR SCC WITH CPA



SYSTEM NUMBER	805-972-...00
GENDER	female
INTERFACE	EMEA
CONNECTION TYPE	multicore cable
PRODUCT SPECIFICATION	EPS-100043
PROCESS SPECIFICATION	EVS-100097
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	750 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 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 ²), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
EMC PERFORMANCE (6.0 MM ²)	> 70 dB (10 kHz to 5 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
CPA SYSTEM	operating force < 30 N
HVIL SYSTEM	minimum 1.0 mm (nominal 2.0 mm), leading
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

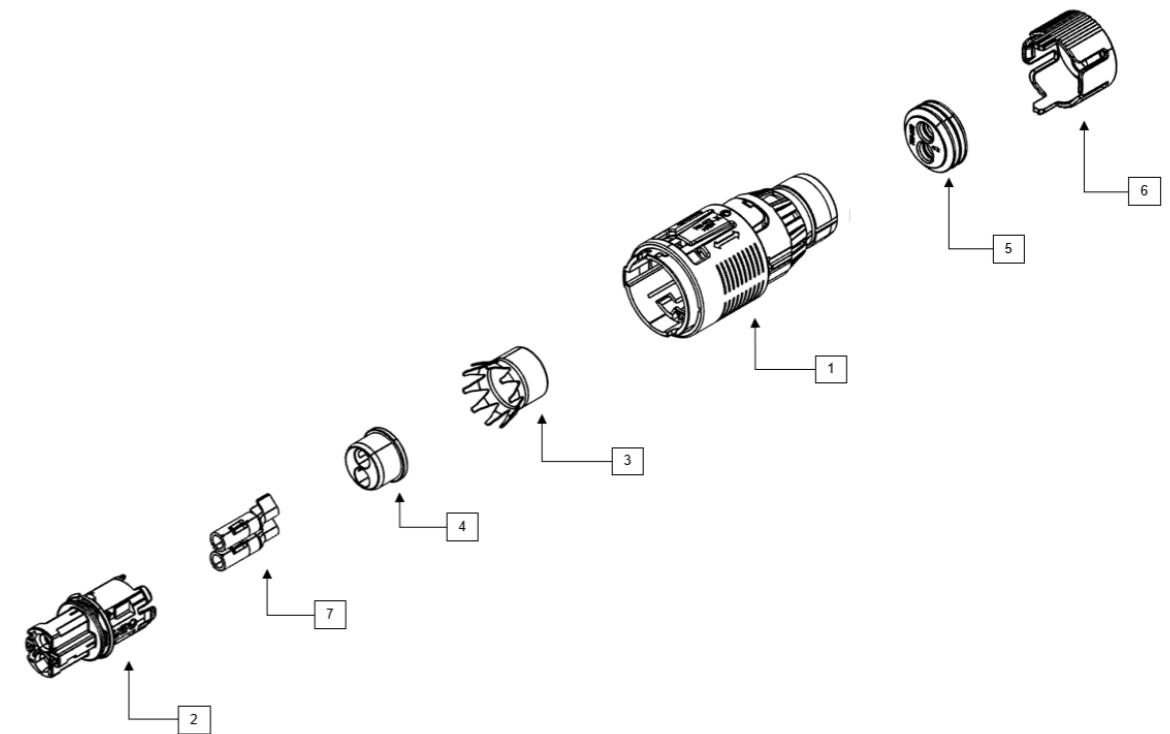
CONTACT SYSTEM	HCT4 (4.0 mm round terminal), Ag, crimped
MATERIAL/SURFACE	Cu-Leg., CuNiSi, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	3.0 mm ² , 5.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, Z

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS40-1 LOCKING DEVICE	806-230-516	•	
2	HPS40-1 FEMALE CONTACT CARRIER	806-229-...	•	
3	HPS40-1 SHIELD CRIMP SOCKET	709-115-511	•	
4	HPS40-1 STRESS RELIEF SCC	709-973-...	•	
5	HPS40-1 CABLE SEAL SCC	709-972-501	•	
6	HPS40-1 COVER CAP SCC	706-541-501	•	
7	HCT4 TERMINAL	709-427-504	•	
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

MATING CONNECTOR

HPS40-1 2+2 MALE CONNECTOR

Page 20, 22, 24

HPS40-1 2+2 FEMALE CONNECTOR BLIND PLUG

SYSTEM NUMBER	906-151-...00
GENDER	female
INTERFACE	EMEA
CONNECTION TYPE	blind plug
APPLICATIONS	auxiliary units

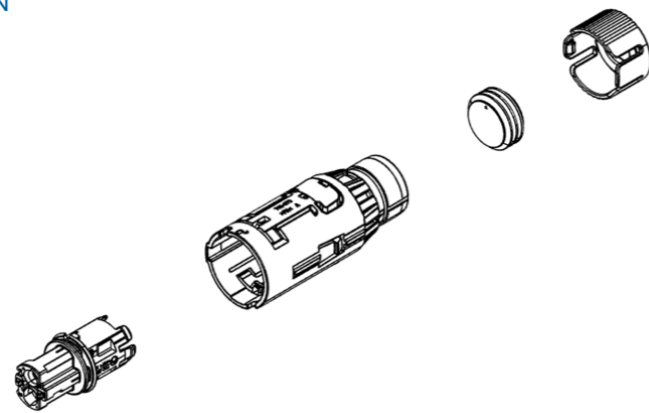


TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (HVIL optional)
OPERATING CONDITION	750 VDC
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
SHIELDED AREA	360° circumferential
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
VALIDATION NORMS	compliant with several automotive test specifications

CUSTOMER SPECIFIC INFORMATION

CONTACT CARRIER CODINGS	Z
-------------------------	---



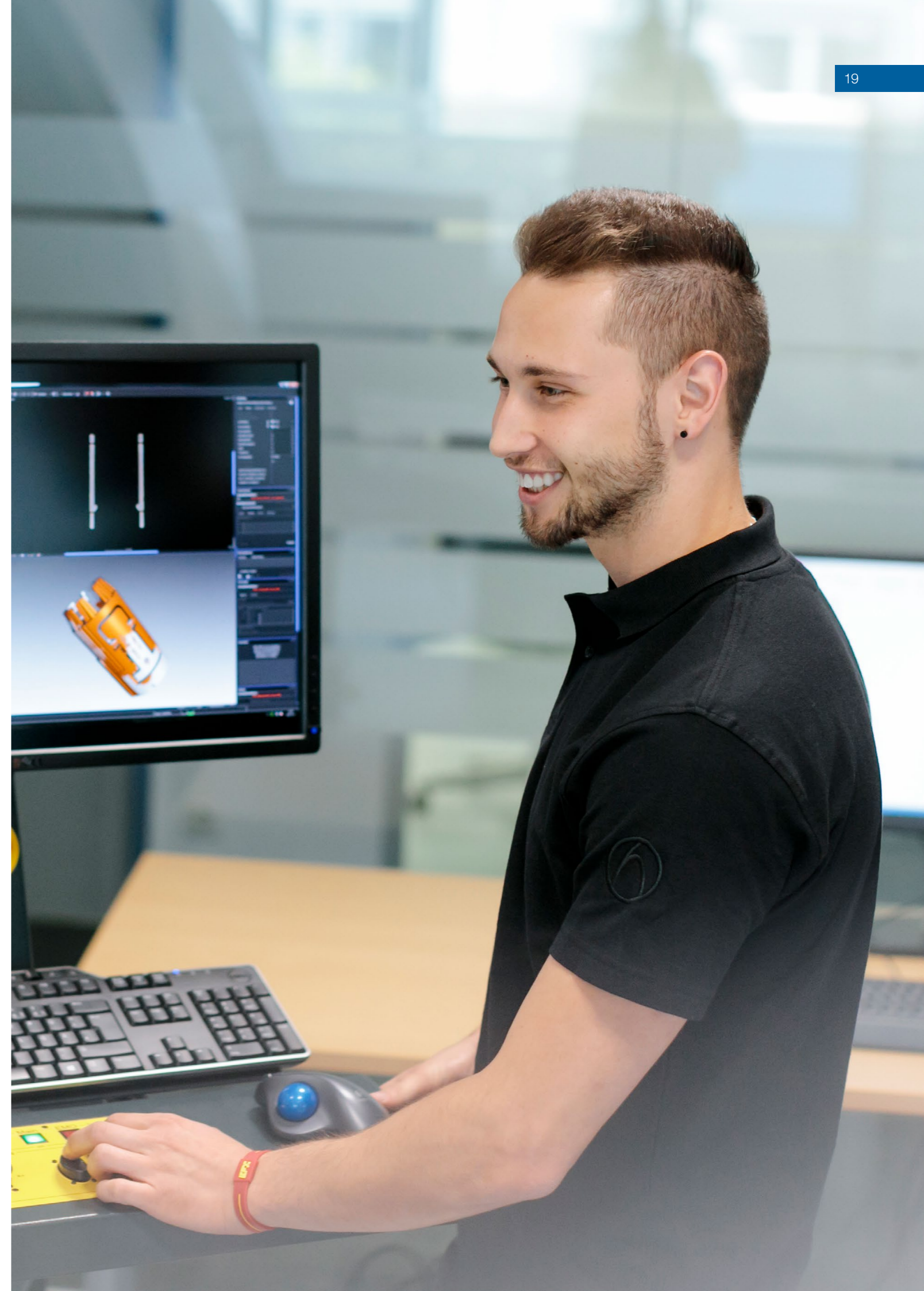
DOWNLOADS

- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40-1 2+2 MALE CONNECTOR

Page 20, 22, 24





HPS40-1 2+2 MALE CONNECTOR 180° WIRE WPT

SYSTEM NUMBER	806-029-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100042
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

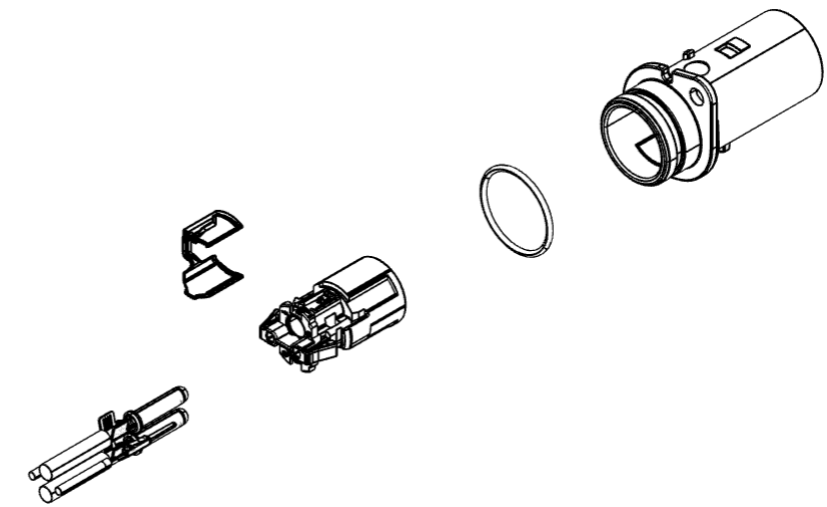
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	750 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	62 A at 80° C (6.0 mm ²), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
EMC PERFORMANCE (6.0 MM ²)	> 70 dB (10 kHz to 5 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
CPA SYSTEM	operating force < 30 N
HVIL SYSTEM	minimum 1.0 mm (nominal 2.0 mm), leading
VALIDATION NORMS	compliant with several automotive test specifications

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 ² , 4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C
CONFIGURATION	customer specific wire configuration possible on request
SCREW TYPE	M4



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40-1 2+2 FEMALE CONNECTOR

Page 10, 12, 14, 16, 18



HPS40-1 2+2 MALE CONNECTOR 90° WIRE WPT

SYSTEM NUMBER	806-029-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100042
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

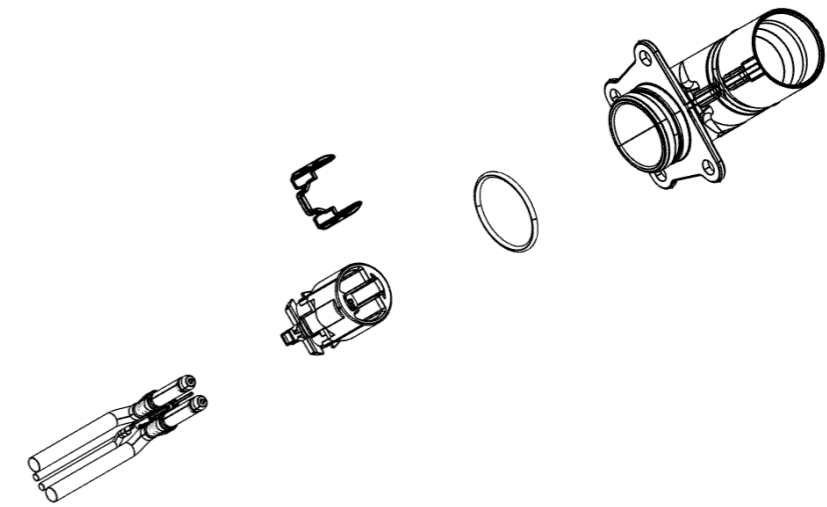
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	750 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	62 A at 80° C (6.0 mm ²), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
EMC PERFORMANCE (6.0 MM ²)	> 70 dB (10 kHz to 5 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
CPA SYSTEM	operating force < 30 N
HVIL SYSTEM	minimum 1.0 mm (nominal 2.0 mm), leading
VALIDATION NORMS	compliant with several automotive test specifications

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 ² , 4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C
CONFIGURATION	customer specific wire configuration possible on request
SCREW TYPE	M4



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40-1 2+2 FEMALE CONNECTOR

Page 10, 12, 14, 16, 18



HPS40-1 2+2 MALE CONNECTOR 124° WIRE WPT

SYSTEM NUMBER	906-504-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100042
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

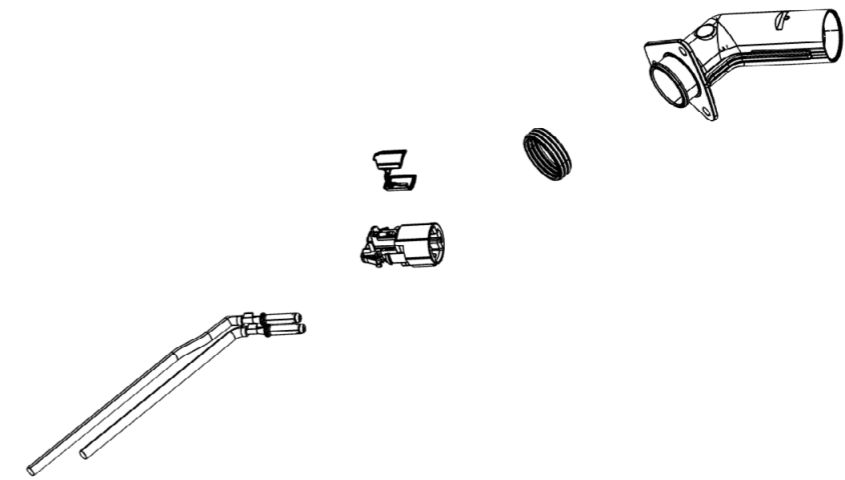
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	750 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	62 A at 80° C (6.0 mm ²), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
EMC PERFORMANCE (6.0 MM ²)	> 70 dB (10 kHz to 5 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
CPA SYSTEM	operating force < 30 N
HVIL SYSTEM	minimum 1.0 mm (nominal 2.0 mm), leading
VALIDATION NORMS	compliant with several automotive test specifications

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 ² , 4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C
CONFIGURATION	customer specific wire configuration possible on request
SCREW TYPE	M4



MATING CONNECTOR

HPS40-1 2+2 FEMALE CONNECTOR

Page 10, 12, 14, 16, 18

HPS40-1 3+2 FEMALE CONNECTOR MCC



SYSTEM NUMBER	807-135-...00
GENDER	female
INTERFACE	EMEA
CONNECTION TYPE	multicore cable
PRODUCT SPECIFICATION	EPS-100043
PROCESS SPECIFICATION	EVS-100071
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	3 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	750 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	35 A at 80° C (2.5 mm ²), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
EMC PERFORMANCE (6.0 MM ²)	> 70 dB (10 kHz to 5 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
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

CONTACT SYSTEM	Kostal LKS (1.5 mm terminal)
MATERIAL/SURFACE	CuBe, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

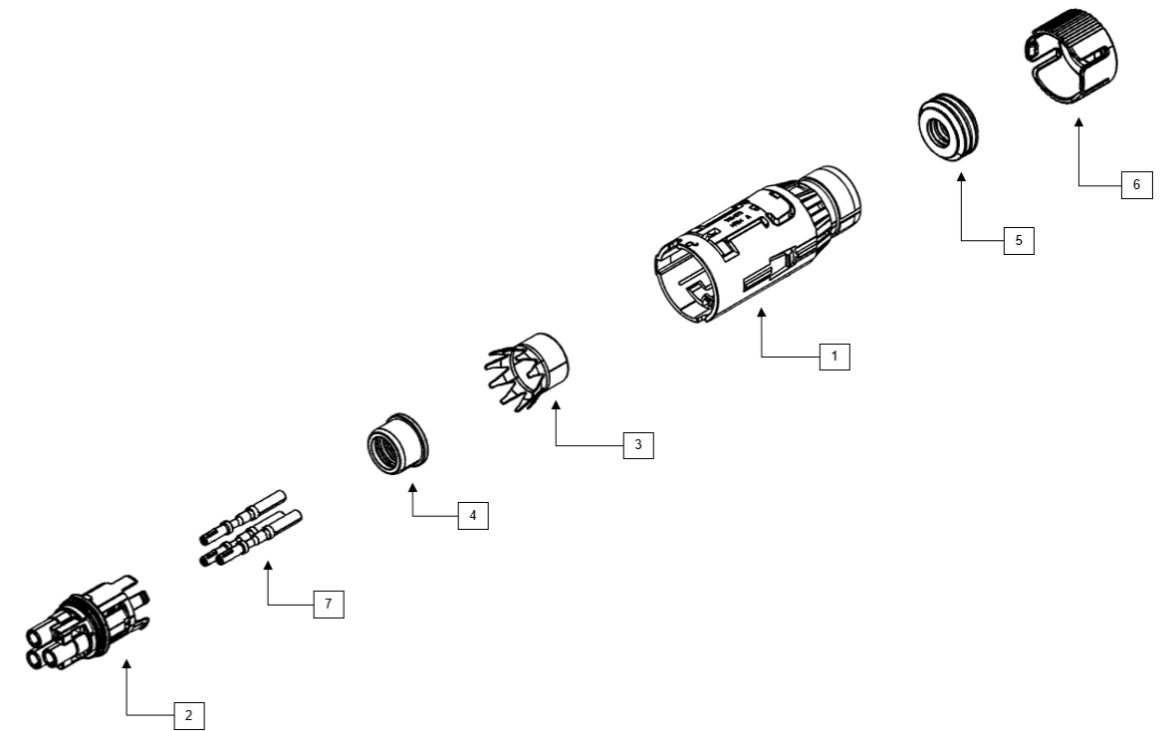
CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	2.5 mm ²
CONTACT CARRIER CODINGS	A

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS40-1 LOCKING DEVICE	806-230-515	•	
2	HPS40-1 FEMALE CONTACT CARRIER	807-137-501	•	
3	HPS40-1 SHIELD CRIMP SOCKET	709-115-511	•	
4	HPS40-1 STRESS RELIEF MCC	709-107-518	•	
5	HPS40-1 CABLE SEAL MCC	709-113-512	•	
6	HPS40-1 COVER CAP MCC	705-749-518	•	
7	KOSTAL LKS 1.5 MM TERMINAL	2 21 24 49288 0 (KOSTAL NO.)	•	

* ... shielded high voltage cable (see possible cable suppliers in the process specification)



DOWNLOADS

- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40-1 3+2 MALE CONNECTOR

Page 30, 32

HPS40-1 3+2 FEMALE CONNECTOR MCC WITH CPA



SYSTEM NUMBER	807-135-...00
GENDER	female
INTERFACE	EMEA
CONNECTION TYPE	multicore cable
PRODUCT SPECIFICATION	EPS-100043
PROCESS SPECIFICATION	EVS-100071
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	3 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	750 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	35 A at 80° C (2.5 mm ²), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
EMC PERFORMANCE (6.0 MM ²)	> 70 dB (10 kHz to 5 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
CPA SYSTEM	operating force < 30 N
HVIL SYSTEM	minimum 1.0 mm (nominal 2.0 mm), leading
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

CONTACT SYSTEM	Kostal LKS (1.5 mm terminal)
MATERIAL/SURFACE	CuBe, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

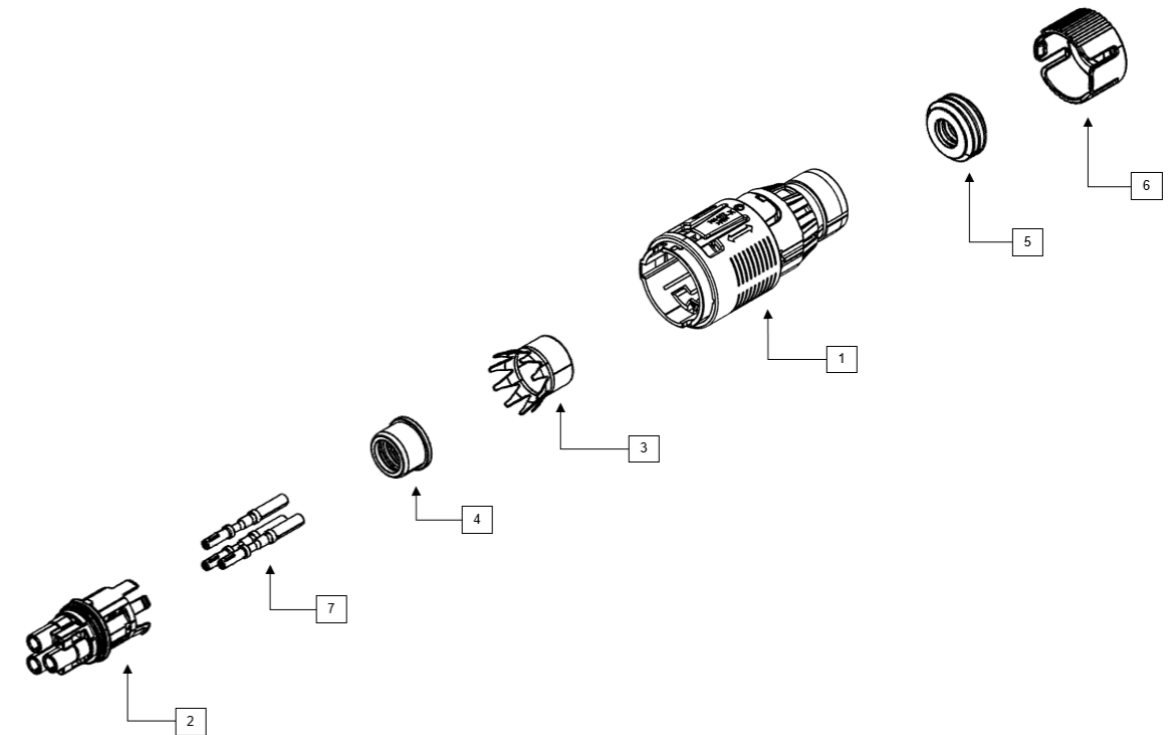
CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	2.5 mm ²
CONTACT CARRIER CODINGS	A

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS40-1 LOCKING DEVICE	806-230-516	•	
2	HPS40-1 FEMALE CONTACT CARRIER	807-137-501	•	
3	HPS40-1 SHIELD CRIMP SOCKET	709-115-511	•	
4	HPS40-1 STRESS RELIEF MCC	709-107-518	•	
5	HPS40-1 CABLE SEAL MCC	709-113-512	•	
6	HPS40-1 COVER CAP MCC	705-749-518	•	
7	KOSTAL LKS 1.5 MM TERMINAL	2 21 24 49288 0 (KOSTAL NO.)	•	

* ... shielded high voltage cable (see possible cable suppliers in the process specification)



DOWNLOADS

- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING

MATING CONNECTOR

HPS40-1 3+2 MALE CONNECTOR

Page 30, 32



HPS40-1 3+2 MALE CONNECTOR 180° WIRE WPT

SYSTEM NUMBER	807-136-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100042
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

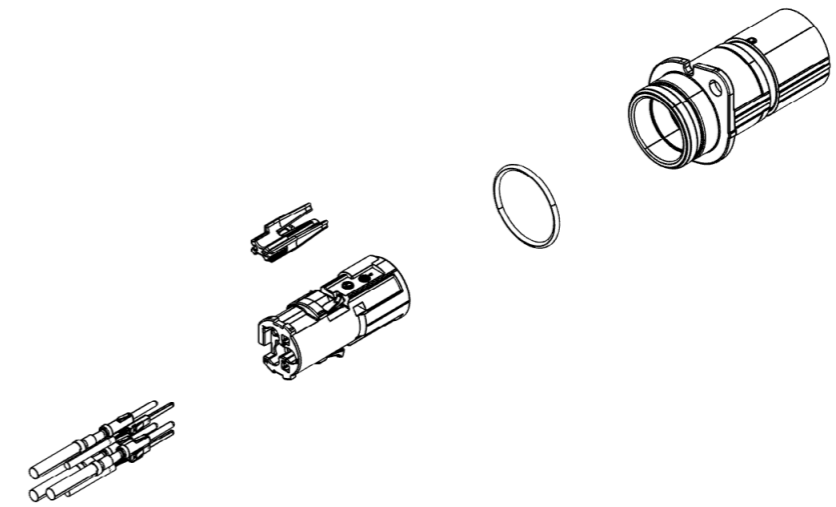
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	3 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	750 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	35 A at 80° C (2.5 mm ²), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
EMC PERFORMANCE (6.0 MM ²)	> 70 dB (10 kHz to 5 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
CPA SYSTEM	operating force < 30 N
HVIL SYSTEM	minimum 1.0 mm (nominal 2.0 mm), leading
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

CONTACT SYSTEM	Kostal LKS (1.5 mm terminal)
MATERIAL/SURFACE	CuBe, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	2.5 mm ²
CONTACT CARRIER CODINGS	A



DOWNLOADS

- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40-1 3+2 FEMALE CONNECTOR

Page 26, 28



HPS40-1 3+2 MALE CONNECTOR 90° WIRE WPT

SYSTEM NUMBER	807-136-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100042
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

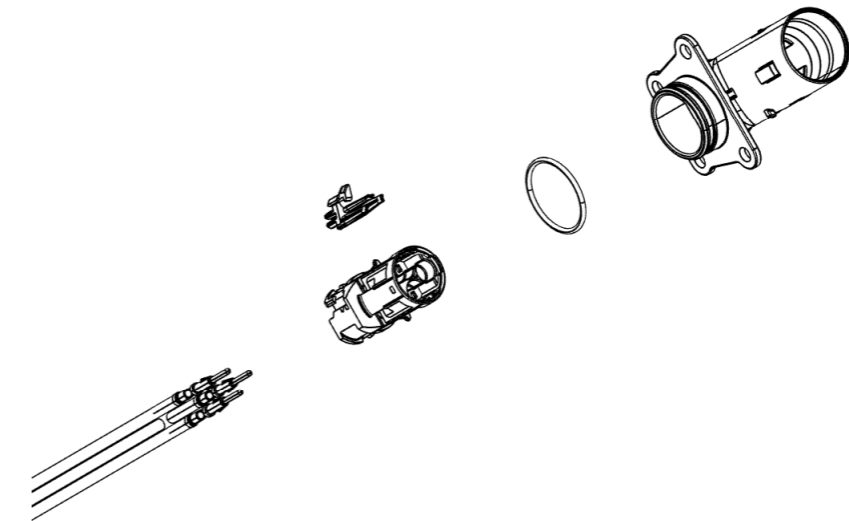
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	3 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	750 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	35 A at 80° C (2.5 mm ²), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
EMC PERFORMANCE (6.0 MM ²)	> 70 dB (10 kHz to 5 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
CPA SYSTEM	operating force < 30 N
HVIL SYSTEM	minimum 1.0 mm (nominal 2.0 mm), leading
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

CONTACT SYSTEM	Kostal LKS (1.5 mm terminal)
MATERIAL/SURFACE	CuBe, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	2.5 mm ²
CONTACT CARRIER CODINGS	A



DOWNLOADS

- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40-1 3+2 FEMALE CONNECTOR

Page 26, 28

HPS40-2 2+2

INTRODUCTION

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 40-2 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, has an integrated interlock and a circumferential shield transition for secure connection and disconnection.

HPS40-2 2+2 FEMALE CONNECTOR MCC



SYSTEM NUMBER	807-655-...00
GENDER	female
INTERFACE	EMEA
CONNECTION TYPE	multicore cable
PRODUCT SPECIFICATION	EPS-100096
PROCESS SPECIFICATION	EVS-100096
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
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 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
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

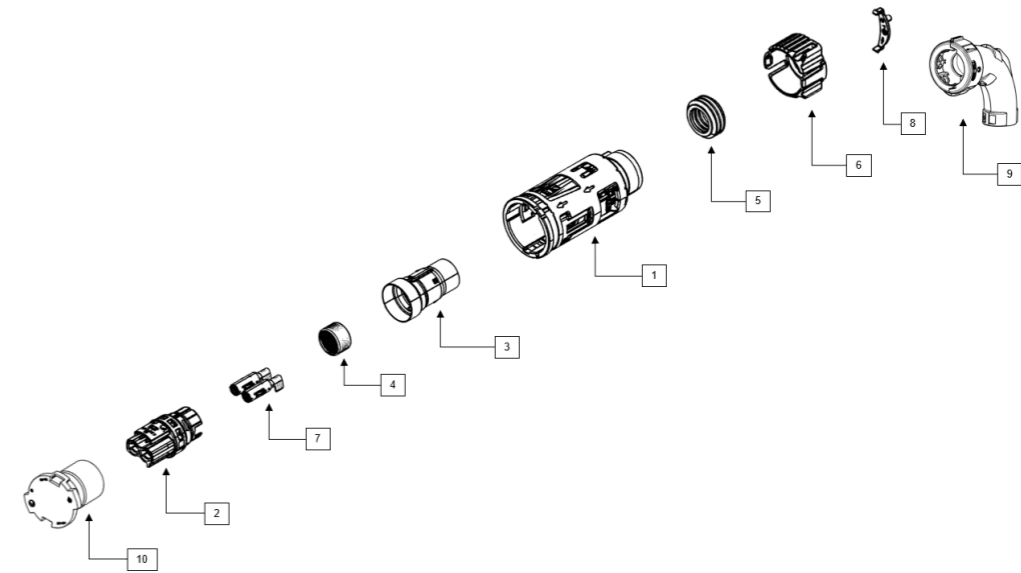
CONTACT SYSTEM	HCT4 (4.0 mm round terminal), Ag, crimped
MATERIAL/SURFACE	Cu-Leg., CuNiSi, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	2.5 mm ² , 4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D, Z

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS40-2 LOCKING DEVICE	807-656-...	•	
2	HPS40-2 FEMALE CONTACT CARRIER	807-657-...	•	
3	HPS40-2 SHIELDING SLEEVE MCC	709-840-501	•	
4	HPS40-2 STRESS RELIEF MCC	709-841-...	•	
5	HPS40-2 CABLE SEAL MCC	709-113-...	•	
6	HPS40-2 COVER CAP MCC	706-430-...	•	
7	HCT4 TERMINAL	709-427-...	•	
8	HPS40-2 CODING CLIP	706-505-...		•
9	HPS40-2 90° ANGLE CAP	706-506-503		•
10	HPS40-2 PROTECTION CAP	706-672-501		•
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

MATING CONNECTOR

HPS40-2 2+2 MALE CONNECTOR
HPS IN-LINE MALE CONNECTOR

Page 42, 44, 46, 48, 50, 52, 54, 56
Page 104, 106

HPS40-2 2+2 FEMALE CONNECTOR SCC



SYSTEM NUMBER	807-655-...00
GENDER	female
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100096
PROCESS SPECIFICATION	EVS-100111
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	63 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 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 (without fixation point)
VIBRATION STRENGTH 4	according to LV214/215 - PG17 (first fixation point at < 200 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
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

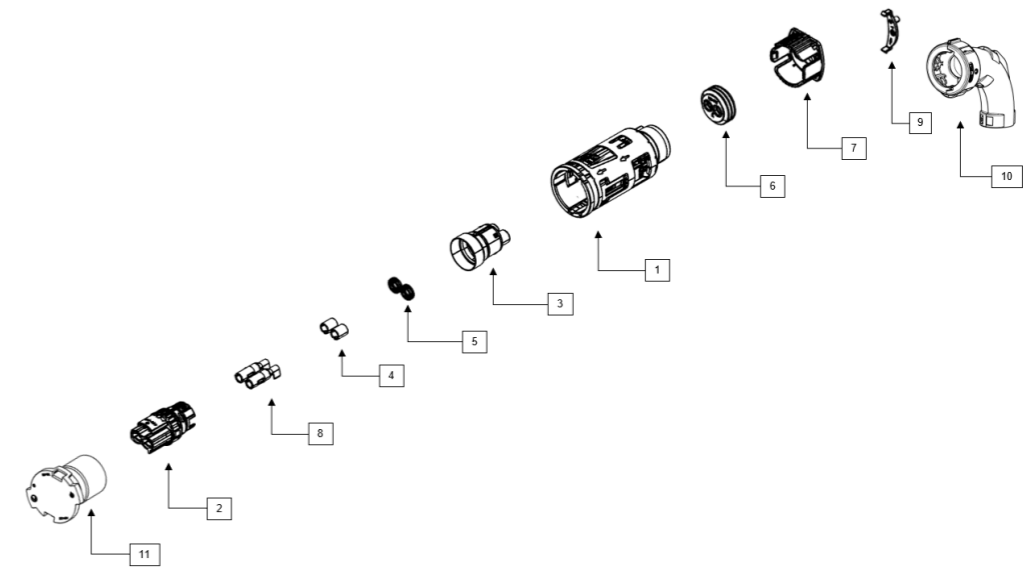
CONTACT SYSTEM	HCT4 (4.0 mm round terminal), Ag, crimped
MATERIAL/SURFACE	Cu-Leg., CuNiSi, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D, Z

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS40-2 LOCKING DEVICE	807-656-...	•	
2	HPS40-2 FEMALE CONTACT CARRIER	807-657-...	•	
3	HPS40-2 SHIELDING SLEEVE SCC	710-161-...	•	
4	HPS40-2 STRESS RELIEF SCC	710-195-502 (4.0 MM ²), 710-671-501 (6.0 MM ²)	•	
5	HPS40-2 X-RING	710-675-501 (6.0MM ²)	•	
6	HPS40-2 CABLE SEAL SCC	709-972-...	•	
7	HPS40-2 COVER CAP SCC	706-822-...	•	
8	HCT4 TERMINAL	709-427-...	•	
9	HPS40-2 CODING CLIP	706-505-...		•
10	HPS40-2 90° ANGLE CAP	706-506-503		•
11	HPS40-2 PROTECTION CAP	706-672-501		•
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

MATING CONNECTOR

HPS40-2 2+2 MALE CONNECTOR
HPS IN-LINE MALE CONNECTOR

Page 42, 44, 46, 48, 50, 52, 54, 56
Page 104, 106

HPS40-2 2+2 FEMALE CONNECTOR BLIND PLUG

SYSTEM NUMBER	809-472-...00
GENDER	female
INTERFACE	EMEA
CONNECTION TYPE	blind plug
APPLICATIONS	auxiliary units

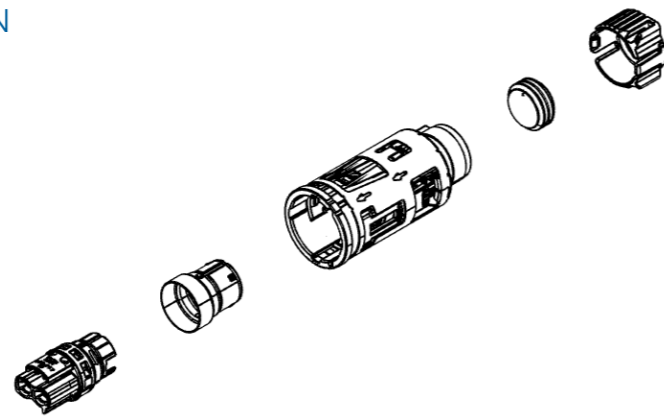


TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
SHIELDED AREA	360° circumferential
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
VALIDATION NORMS	compliant with several automotive test specifications

CUSTOMER SPECIFIC INFORMATION

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



DOWNLOADS

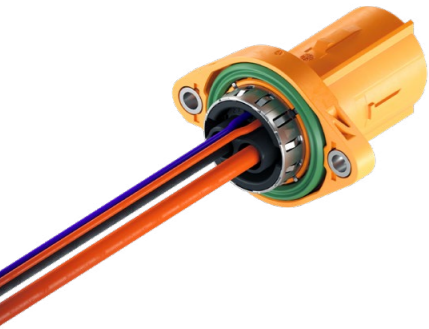
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40-2 2+2 MALE CONNECTOR

Page 42, 44, 46, 48, 50, 52, 54, 56





HPS40-2 2+2 MALE CONNECTOR 180° WIRE

SYSTEM NUMBER	807-652-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100132
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

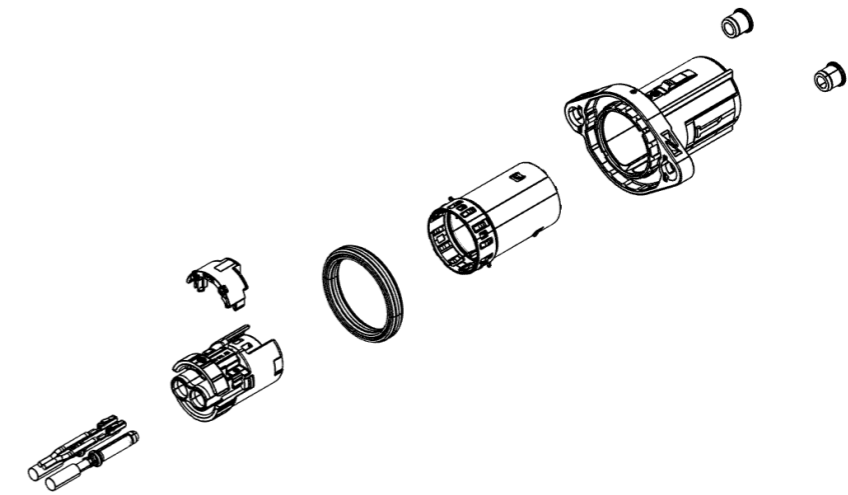
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	63 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 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
VALIDATION NORMS	compliant with several automotive test specifications

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 ² , 4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D
CONFIGURATION	customer specific wire configuration possible on request
SCREW TYPE	M4



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40-2 2+2 FEMALE CONNECTOR

Page 36, 38, 40



HPS40-2 2+2 MALE CONNECTOR 180° BLADE

SYSTEM NUMBER	809-855-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	blade
PRODUCT SPECIFICATION	EPS-100128
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

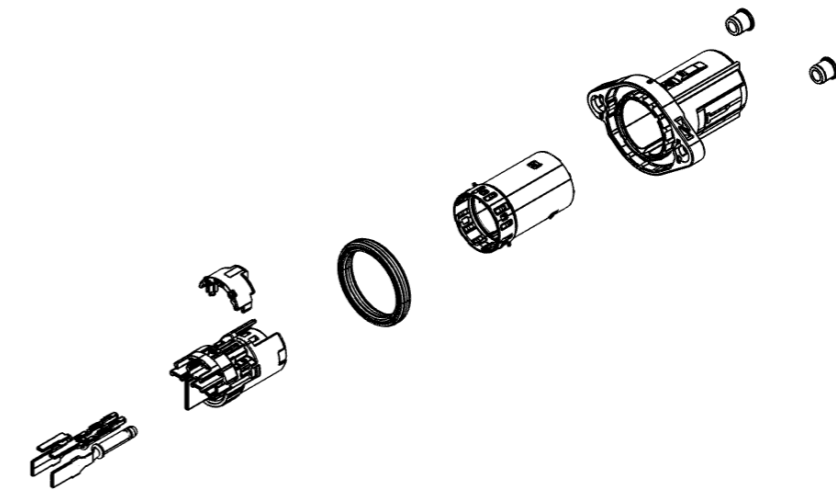
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	60 A at 80° C, 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 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
VALIDATION NORMS	compliant with several automotive test specifications

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

CONTACT CARRIER CODINGS	A, B, C, D
CONFIGURATION	customer specific blade configuration possible on request
SCREW TYPE	M4



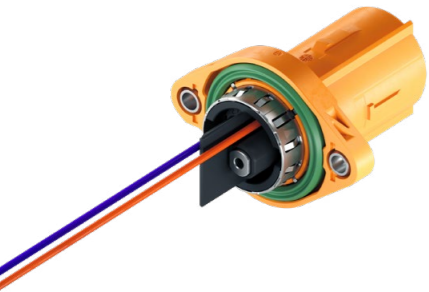
DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40-2 2+2 FEMALE CONNECTOR

Page 36, 38, 40



HPS40-2 2+2 MALE CONNECTOR 180° BUSBAR

SYSTEM NUMBER	809-226-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	busbar
PRODUCT SPECIFICATION	in progress
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

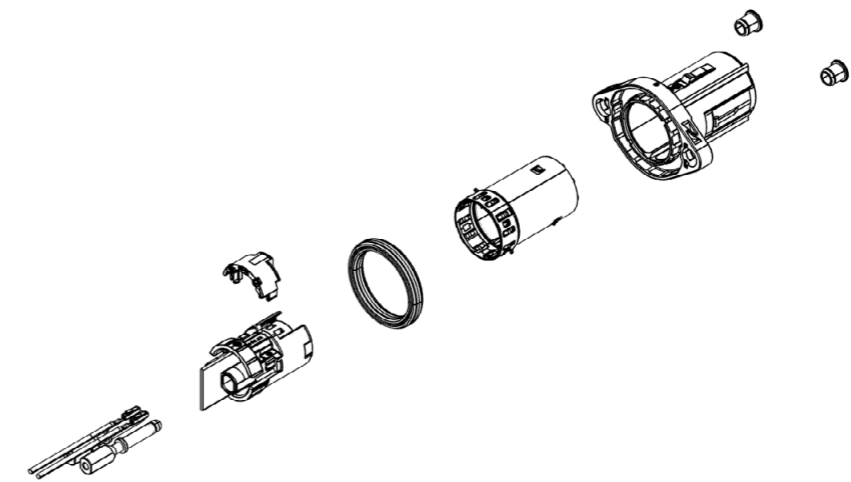
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	63 A at 80° C, 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 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
VALIDATION NORMS	compliant with several automotive test specifications

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

CONTACT CARRIER CODINGS	A, B, C, D
CONFIGURATION	customer specific wire configuration possible on request
SCREW TYPE	M4



DOWNLOADS

- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40-2 2+2 FEMALE CONNECTOR

Page 36, 38, 40



HPS40-2 2+2 MALE CONNECTOR 180° WIRE DUPLEX

SYSTEM NUMBER	809-547-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	in progress
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

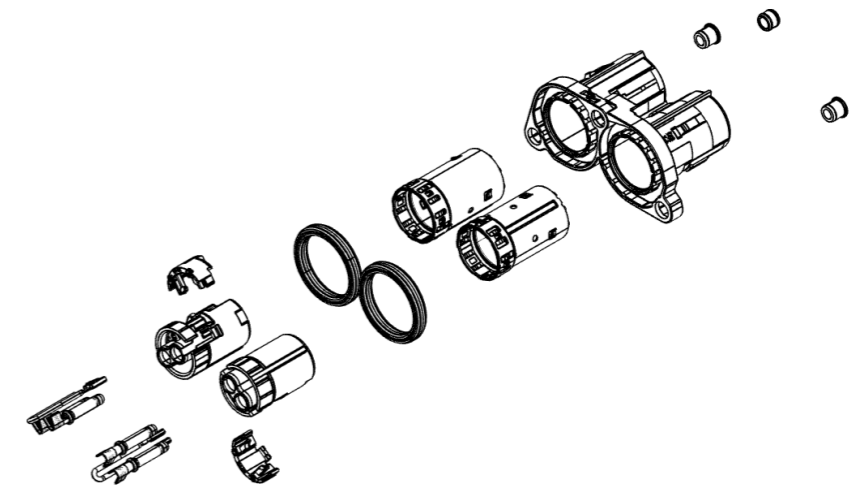
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	63 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 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
VALIDATION NORMS	compliant with several automotive test specifications

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 ² , 4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D
CONFIGURATION	customer specific wire configuration possible on request
SCREW TYPE	M4



DOWNLOADS

- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40-2 2+2 FEMALE CONNECTOR

Page 36, 38, 40



HPS40-2 2+2 MALE CONNECTOR 90° WIRE

SYSTEM NUMBER	809-366-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100132
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

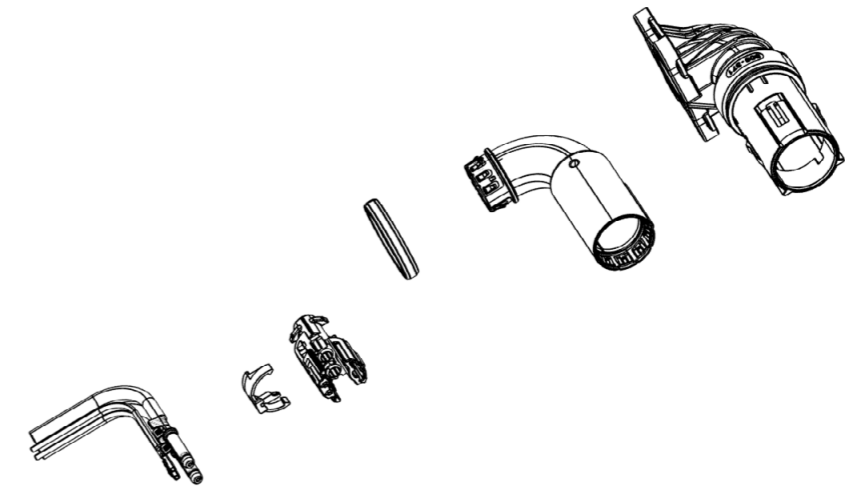
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	63 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 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
VALIDATION NORMS	compliant with several automotive test specifications

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 ² , 4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D
CONFIGURATION	customer specific wire configuration possible on request
SCREW TYPE	M4



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40-2 2+2 FEMALE CONNECTOR

Page 36, 38, 40



HPS40-2 2+2 MALE CONNECTOR 90° WIRE

SYSTEM NUMBER	810-104-...01
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100132
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

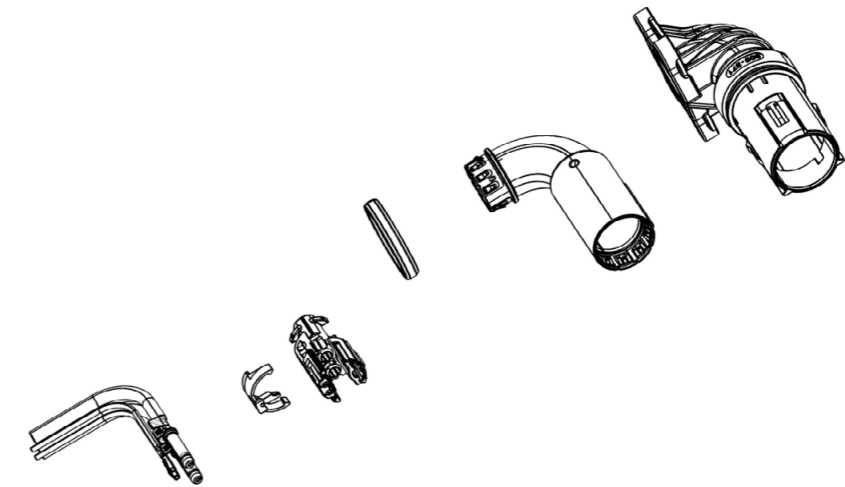
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	63 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 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
VALIDATION NORMS	compliant with several automotive test specifications

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 ² , 4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D
CONFIGURATION	customer specific wire configuration possible on request
SCREW TYPE	M5



DOWNLOADS

► PRODUCT SPECIFICATION

MATING CONNECTOR

HPS40-2 2+2 FEMALE CONNECTOR

Page 36, 38, 40



HPS40-2 2+2 MALE CONNECTOR 90° WIRE

SYSTEM NUMBER	810-200-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100132
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

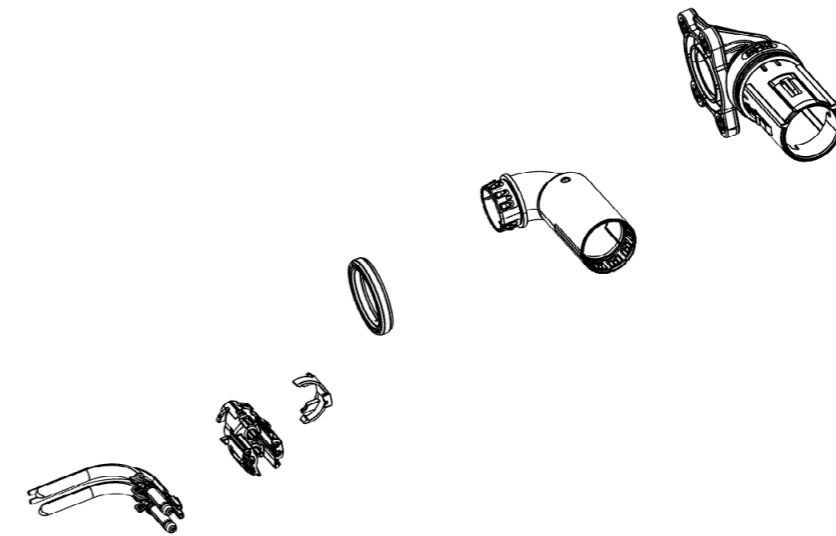
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	63 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 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
VALIDATION NORMS	compliant with several automotive test specifications

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 ² , 4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D
CONFIGURATION	customer specific wire configuration possible on request
SCREW TYPE	M4



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40-2 2+2 FEMALE CONNECTOR

Page 36, 38, 40



HPS40-2 2+2 MALE CONNECTOR 90° BLADE

SYSTEM NUMBER	810-200-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100132
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

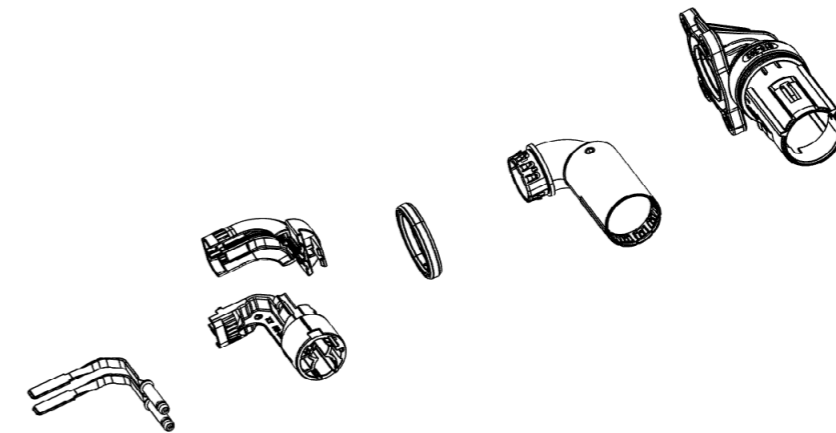
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	63 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 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
VALIDATION NORMS	compliant with several automotive test specifications

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

CONTACT CARRIER CODINGS	A, B, C, D
CONFIGURATION	customer specific wire configuration possible on request
SCREW TYPE	M4



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40-2 2+2 FEMALE CONNECTOR

Page 36, 38, 40

HPS40-2 2+2 FEMALE CONNECTOR NAFTA MCC



SYSTEM NUMBER	809-886-...106
GENDER	female
INTERFACE	NAFTA
CONNECTION TYPE	multicore cable
PRODUCT SPECIFICATION	EPS-100096
PROCESS SPECIFICATION	EVS-100096
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
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 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
VALIDATION NORMS	compliant with several automotive test specifications

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

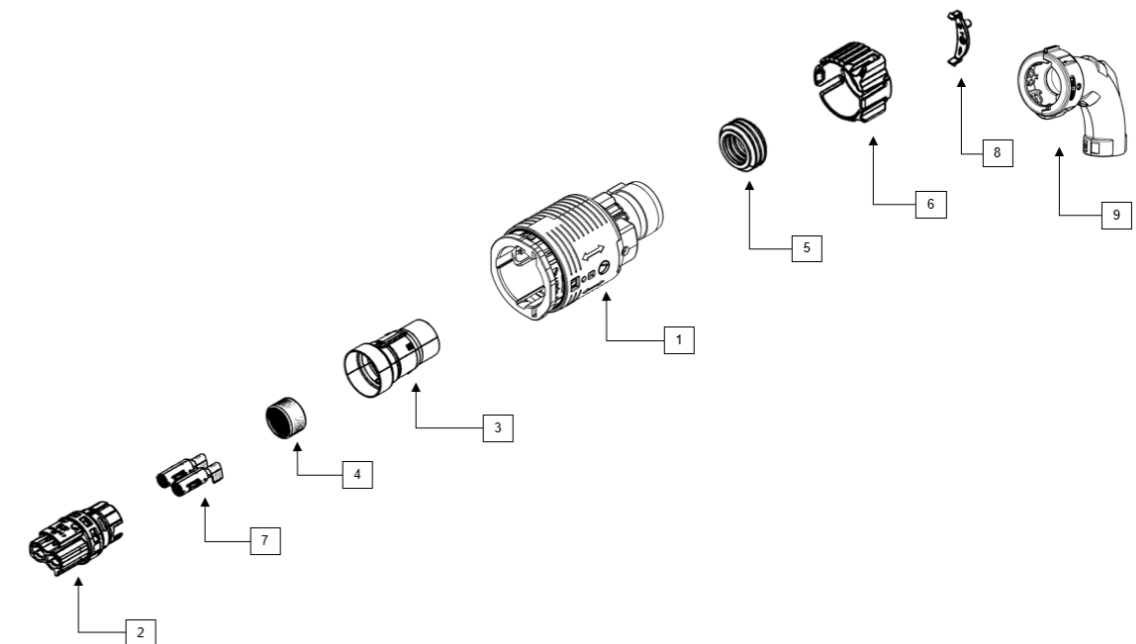
CABLE CROSS SECTION	2.5 mm ² , 4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D, Z

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS40-2 LOCKING DEVICE	807-656-503	•	
2	HPS40-2 FEMALE CONTACT CARRIER	807-657-...	•	
3	HPS40-2 SHIELDING SLEEVE MCC	709-840-501	•	
4	HPS40-2 STRESS RELIEF MCC	709-841-...	•	
5	HPS40-2 CABLE SEAL MCC	709-113-...	•	
6	HPS40-2 COVER CAP MCC	706-430-...	•	
7	HCT4 TERMINAL	709-427-...	•	
8	HPS40-2 CODING CLIP	706-505-...		•
9	HPS40-2 90° ANGLE CAP	706-506-503		•

* ... different indices depending on the used variant (see single part drawings)

* ... shielded high voltage cable (see possible cable suppliers in the process specification)



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

MATING CONNECTOR

HPS40-2 2+2 MALE CONNECTOR

in progress

HPS40-2 2+2 FEMALE CONNECTOR NAFTA SCC



SYSTEM NUMBER	809-886-...106
GENDER	female
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100096
PROCESS SPECIFICATION	EVS-100101
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	63 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 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 (without fixation point)
VIBRATION STRENGTH 4	according to LV214/215 - PG17 (first fixation point at < 200 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
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

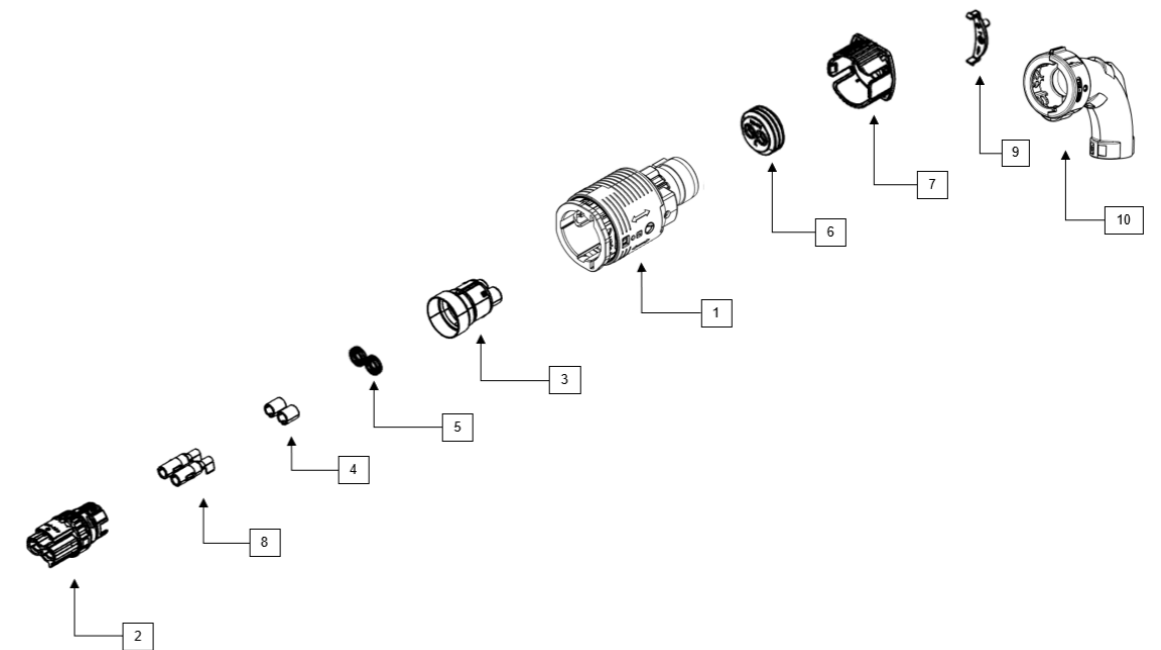
CONTACT SYSTEM	HCT4 (4.0 mm round terminal), Ag, crimped
MATERIAL/SURFACE	Cu-Leg., CuNiSi, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D, Z

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS40-2 LOCKING DEVICE	807-656-503	•	
2	HPS40-2 FEMALE CONTACT CARRIER	807-657-...	•	
3	HPS40-2 SHIELDING SLEEVE SCC	710-161-...	•	
4	HPS40-2 STRESS RELIEF SCC	710-195-502 (4.0 MM ²), 710-671-501 (6.0 MM ²)	•	
5	HPS40-2 X-RING	710-675-501 (6.0MM ²)	•	
6	HPS40-2 CABLE SEAL SCC	709-972-...	•	
7	HPS40-2 COVER CAP SCC	706-822-...	•	
8	HCT4 TERMINAL	709-427-...	•	
9	HPS40-2 CODING CLIP	706-505-...		•
10	HPS40-2 90° ANGLE CAP	706-506-503		•
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

MATING CONNECTOR

HPS40-2 2+2 MALE CONNECTOR

in progress

HPS40-2 2+2 FEMALE CONNECTOR NAFTA BLIND PLUG

SYSTEM NUMBER	809-472-...106
GENDER	female
INTERFACE	EMEA
CONNECTION TYPE	blind plug
APPLICATIONS	auxiliary units

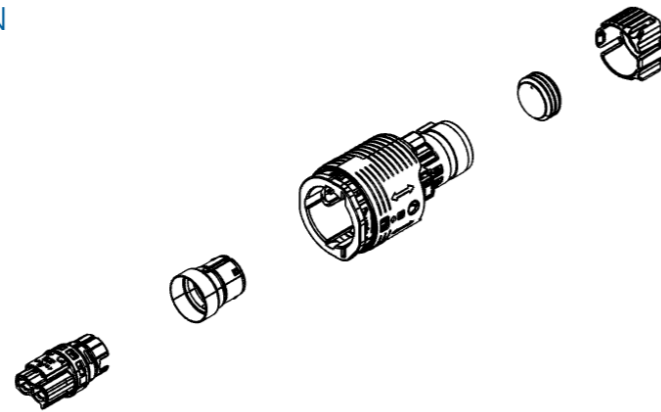


TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
IP-DEGREE OF PROTECTION	IPXXB (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
SHIELDED AREA	360° circumferential
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
VALIDATION NORMS	compliant with several automotive test specifications

CUSTOMER SPECIFIC INFORMATION

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



DOWNLOADS

- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40-2 2+2 MALE CONNECTOR

in progress



HPS40-2 PLUS FEMALE CONNECTOR MCC

SYSTEM NUMBER	810-473-...00
GENDER	female
INTERFACE	PLUS
CONNECTION TYPE	multicore cable
PRODUCT SPECIFICATION	EPS-100153
PROCESS SPECIFICATION	EVS-100137
APPLICATIONS	auxiliary units



TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
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 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
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

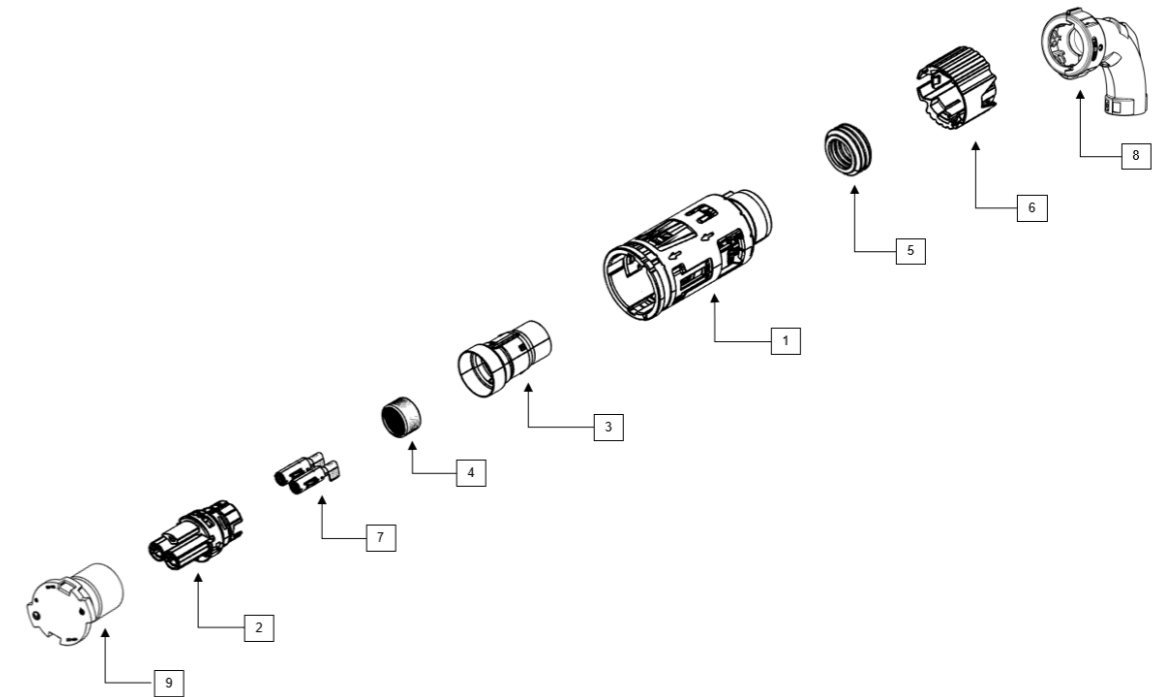
CONTACT SYSTEM	HCT4 (4.0 mm round terminal), Ag, crimped
MATERIAL/SURFACE	Cu-Leg., CuNiSi, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D, Z

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS40-2 LOCKING DEVICE	807-656-...	•	
2	HPS40-2 PLUS FEMALE CONTACT CARRIER	810-474-...	•	
3	HPS40-2 SHIELDING SLEEVE MCC	709-840-501	•	
4	HPS40-2 STRESS RELIEF MCC	709-841-...	•	
5	HPS40-2 CABLE SEAL MCC	709-113-...	•	
6	HPS40-2 PLUS COVER CAP MCC	707-208-...	•	
7	HCT4 TERMINAL	709-427-...	•	
8	HPS40-2 90° ANGLE CAP	706-506-503		•
9	HPS40-2 PROTECTION CAP	706-672-511		•
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

► PROCESS SPECIFICATION

MATING CONNECTOR

HPS40-2 PLUS MALE CONNECTOR

Page 68, 70, 72, 74, 76

HPS IN-LINE CONNECTOR PLUS

Page 112

HPS40-2 PLUS FEMALE CONNECTOR BLIND PLUG

SYSTEM NUMBER	in progress
GENDER	female
INTERFACE	EMEA
CONNECTION TYPE	blind plug
APPLICATIONS	auxiliary units

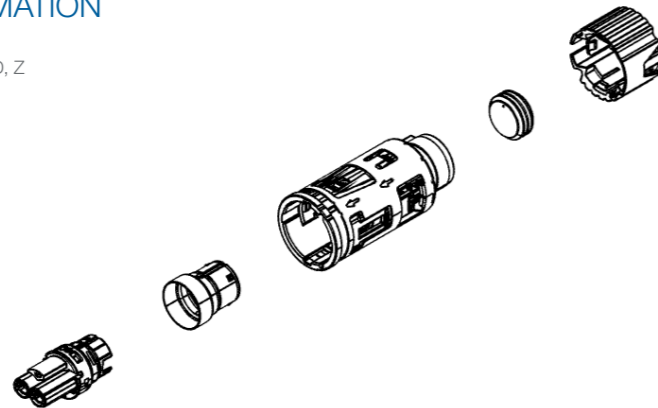


TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
OPERATING CONDITION	1,000 VDC
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
IP-DEGREE OF PROTECTION	IPXXB+ (unmated), IPXXD (mated)
WATERTIGHTNESS	IP6K9K, IPX8
SHIELDED AREA	360° circumferential
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
VALIDATION NORMS	compliant with several automotive test specifications

CUSTOMER SPECIFIC INFORMATION

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



MATING CONNECTOR

HPS40-2 PLUS MALE CONNECTOR

Page 68, 70, 72, 74, 76





HPS40-2 PLUS MALE CONNECTOR 180° WIRE

SYSTEM NUMBER	810-475-...03
GENDER	male
INTERFACE	PLUS
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	in progress
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

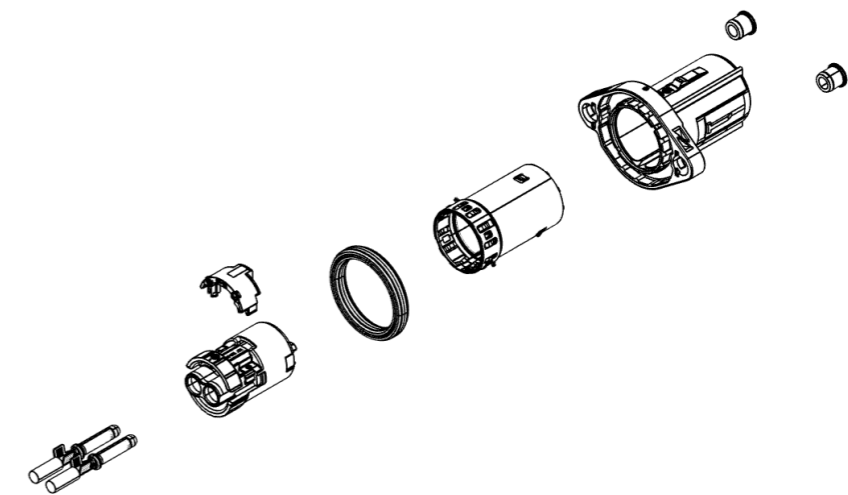
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	63 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 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
VALIDATION NORMS	compliant with several automotive test specifications

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 ² , 4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D
CONFIGURATION	customer specific wire configuration possible on request
SCREW TYPE	M4



MATING CONNECTOR

HPS40-2 PLUS FEMALE CONNECTOR

Page 64, 66



HPS40-2 PLUS MALE CONNECTOR 180° BLADE

SYSTEM NUMBER	in progress
GENDER	male
INTERFACE	PLUS
CONNECTION TYPE	blade
PRODUCT SPECIFICATION	in progress
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

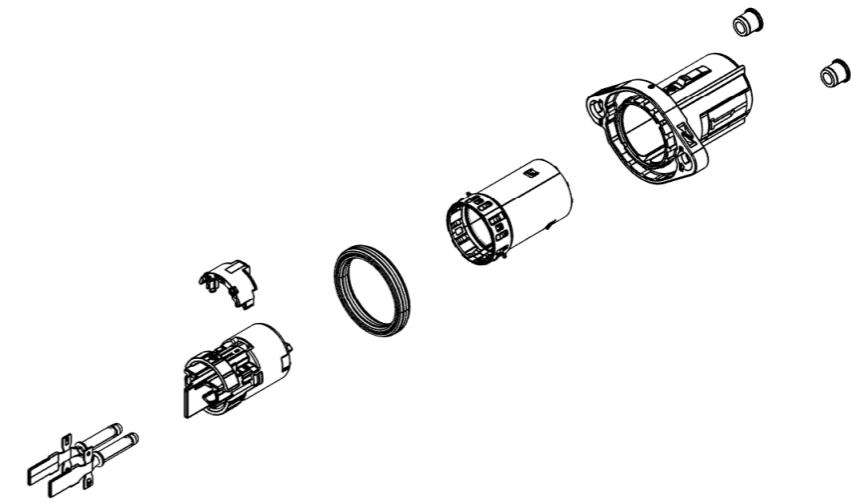
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	60 A at 80° C, 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 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
VALIDATION NORMS	compliant with several automotive test specifications

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

CONTACT CARRIER CODINGS	A, B, C, D
CONFIGURATION	customer specific blade configuration possible on request
SCREW TYPE	M4



MATING CONNECTOR

HPS40-2 PLUS FEMALE CONNECTOR

Page 64, 66



HPS40-2 PLUS MALE CONNECTOR 90° WIRE

SYSTEM NUMBER	810-333-...03
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	in progress
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

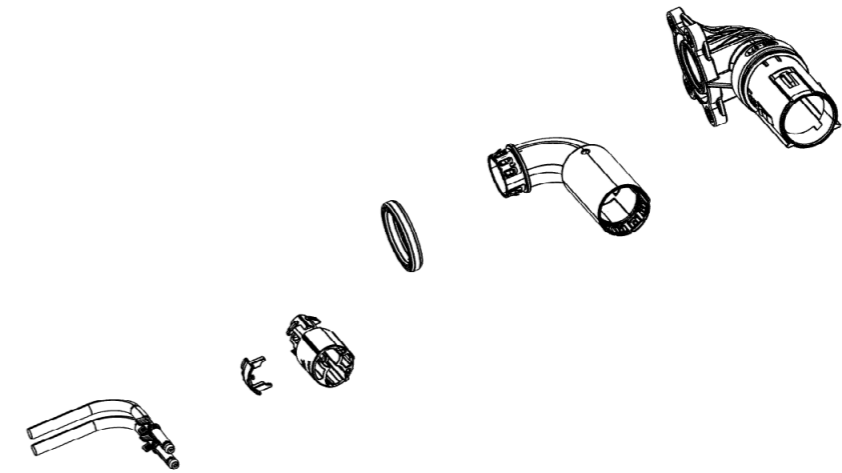
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	63 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 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
VALIDATION NORMS	compliant with several automotive test specifications

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 ² , 4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D
CONFIGURATION	customer specific wire configuration possible on request
SCREW TYPE	M4



MATING CONNECTOR

HPS40-2 PLUS FEMALE CONNECTOR

Page 64, 66



HPS40-2 PLUS MALE CONNECTOR 90° WIRE

SYSTEM NUMBER	810-477-...03
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	in progress
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

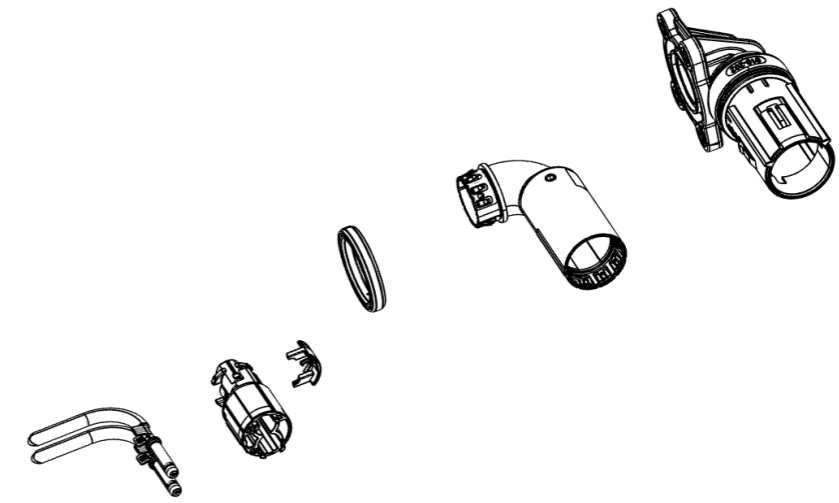
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	63 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 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
VALIDATION NORMS	compliant with several automotive test specifications

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 ² , 4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D
CONFIGURATION	customer specific wire configuration possible on request
SCREW TYPE	M4



MATING CONNECTOR

HPS40-2 PLUS FEMALE CONNECTOR

Page 64, 66



HPS40-2 PLUS MALE CONNECTOR 90° BLADE

SYSTEM NUMBER	810-477-...03
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	in progress
APPLICATIONS	auxiliary units

TECHNICAL PRODUCT INFORMATION

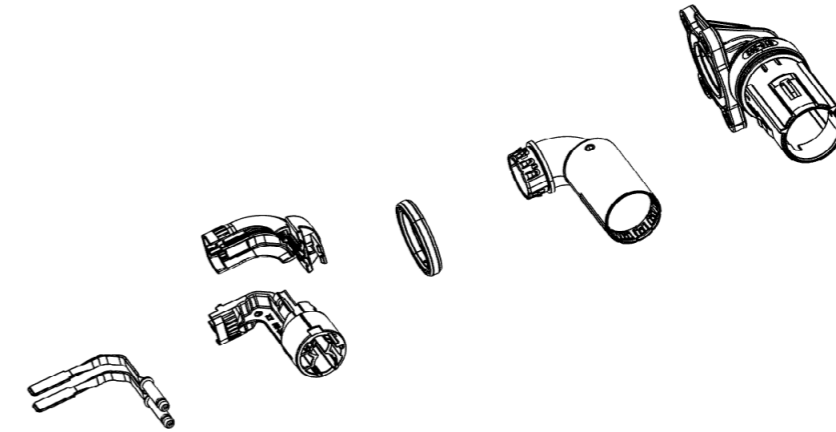
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	63 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 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
VALIDATION NORMS	compliant with several automotive test specifications

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

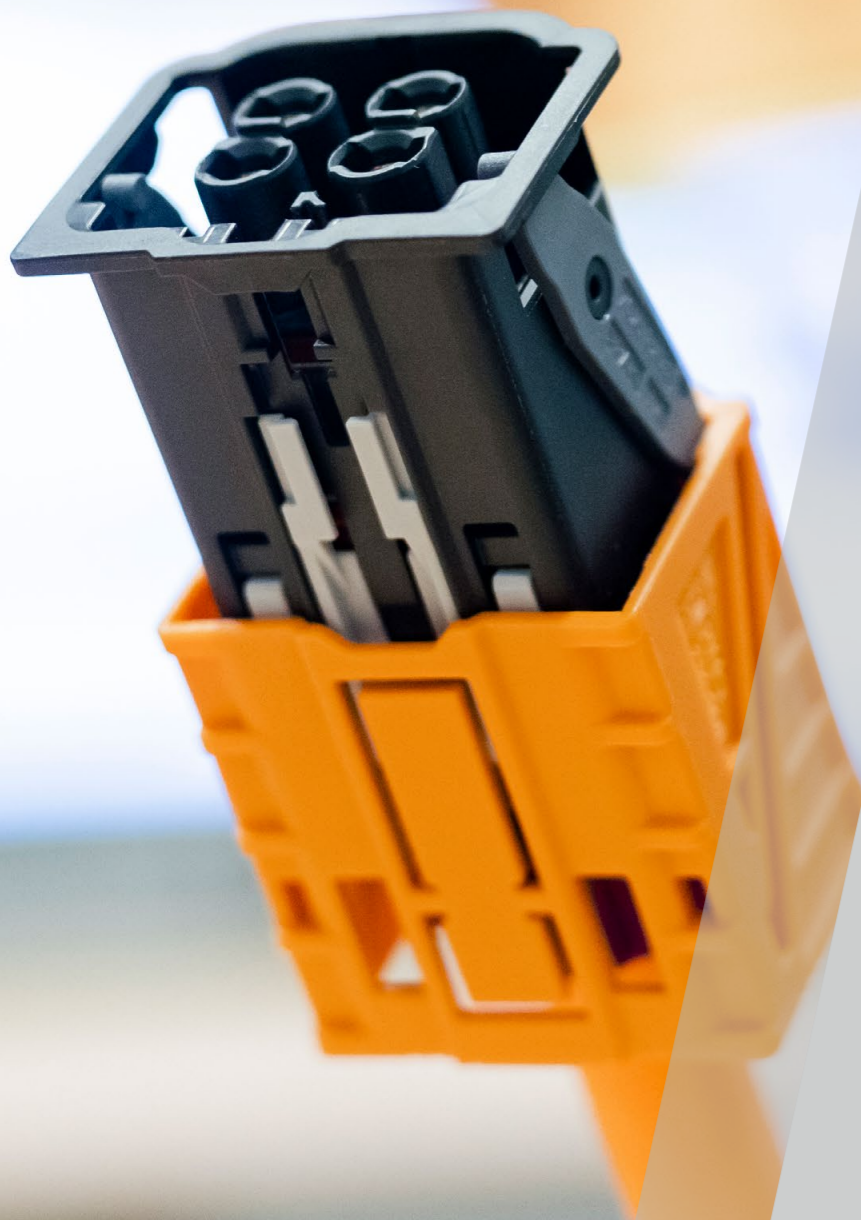
CONTACT CARRIER CODINGS	A, B, C, D
CONFIGURATION	customer specific wire configuration possible on request
SCREW TYPE	M4



MATING CONNECTOR

HPS40-2 PLUS FEMALE CONNECTOR

Page 64, 66



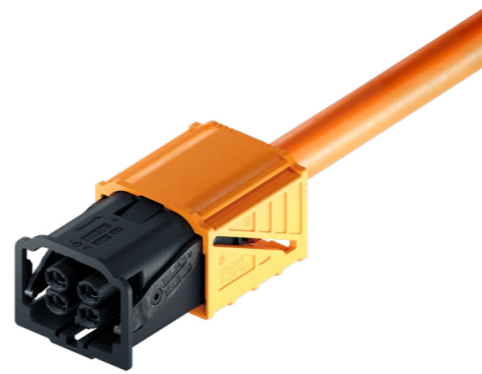
HPS40 4+2

INTRODUCTION

The HIRSCHMANN AUTOMOTIVE PowerStar 40 4+2 connection system is shielded and sealed. It is designed for all high-voltage on-board chargers available on the market that are used in electric vehicles. Needless to say, the high-voltage connectors comply with the global standards of the automotive industry.

The products not only impress with their optimized design and low weight. Their operating flexibility is also hard to beat. As the smallest connection system available in this segment, it guarantees optimum performance and top processing.

HPS40 4+2 FEMALE CONNECTOR MCC



SYSTEM NUMBER	809-981-...00
GENDER	female
INTERFACE	EMEA
CONNECTION TYPE	multicore cable
PRODUCT SPECIFICATION	EPS-100108
PROCESS SPECIFICATION	EVS-100108
APPLICATIONS	3-phase charging

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	4 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	53 A at 80° C (4 x 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 2 MHz < 2.5 mΩ/m until 30 MHz < 5 mΩ/m > 65 dB (30 MHz to 300 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 (first fixation point at < 200 mm)
MATING/UNMATING FORCE	< 75 N
SECONDARY LOCK SYSTEM	activating force < 40 N, no unintentional opening possible
KOSHIRI SAFETY	yes
POLARIZATION/CODING	incorrect insertion force > 225 N
CPA SYSTEM	operating force < 30 N
HVIL SYSTEM	minimum 1.0 mm (nominal 2.0 mm), leading
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

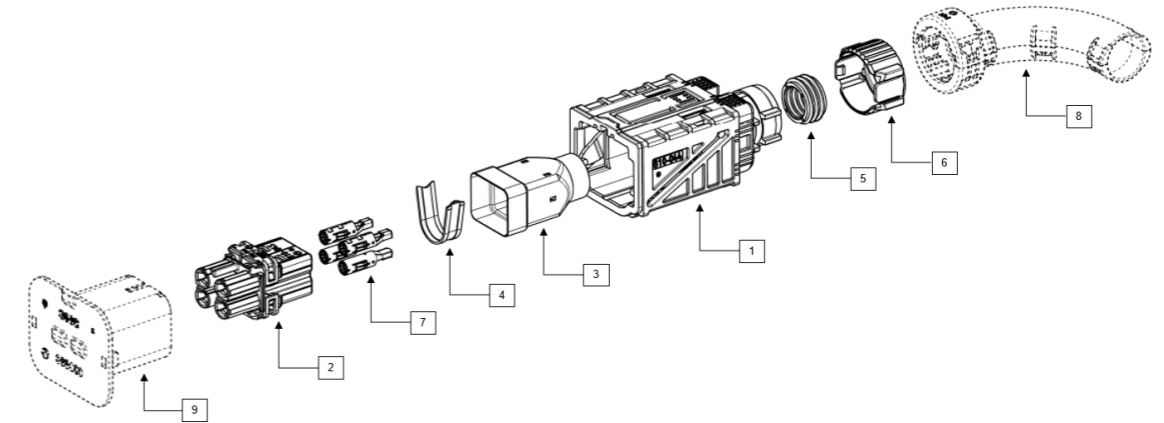
CONTACT SYSTEM	HCT4 (4.0 mm round terminal), Ag, crimped
MATERIAL/SURFACE	Cu-Leg., CuNiSi, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	4.0 mm ² , 6.0 mm ² as MCC solution with different pole numbers
CONTACT CARRIER CODINGS	A, B, Z

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS40 4+2 LOCKING DEVICE	810-044-...	•	
2	HPS40 4+2 FEMALE CONTACT CARRIER	810-045-...	•	
3	HPS40 4+2 SHIELDING SLEEVE MCC	710-237-511	•	
4	HPS40 4+2 FERRULE CRIMP MCC	710-387-..., 710-455-...	•	
5	HPS40 4+2 CABLE SEAL MCC	710-245-...	•	
6	HPS40 4+2 COVER CAP MCC	706-847-...	•	
7	HCT4 TERMINAL	709-427-...	•	
8	HPS40 4+2 90° ANGLE CAP	706-990-501		•
9	HPS40 4+2 PROTECTION CAP	706-991-501		•
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



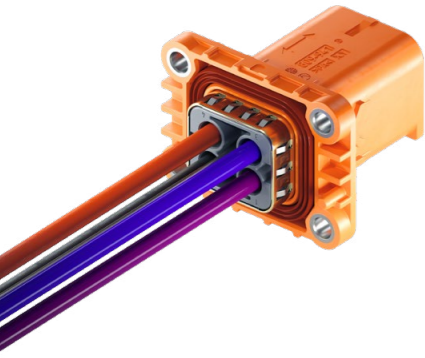
DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

MATING CONNECTOR

HPS40 4+2 MALE CONNECTOR

Page 82, 84, 86



HPS40 4+2 MALE CONNECTOR 180° WIRE

SYSTEM NUMBER	809-980-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100139
APPLICATIONS	3-phase charging

TECHNICAL PRODUCT INFORMATION

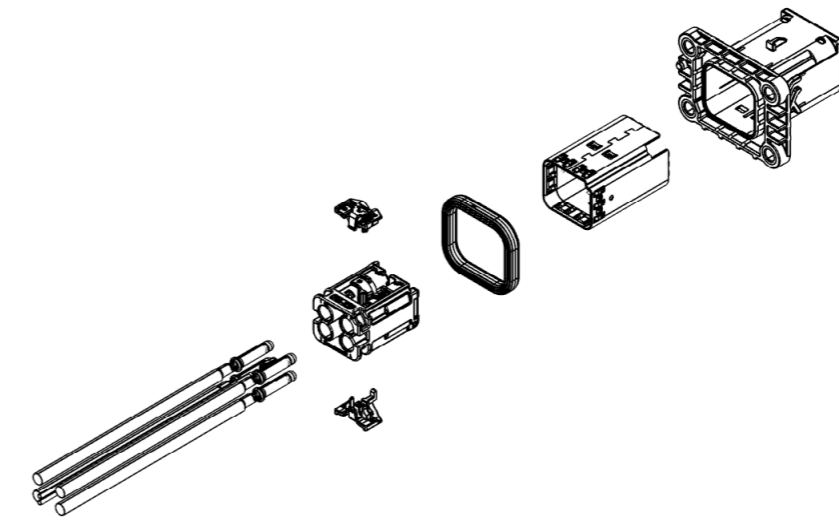
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	4 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	60 A at 80° C (4 x 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 2 MHz < 2.5 mΩ/m until 30 MHz < 5 mΩ/m > 65 dB (30 MHz to 300 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 (first fixation point at < 200 mm)
MATING/UNMATING FORCE	< 75 N
SECONDARY LOCK SYSTEM	activating force < 40 N, no unintentional opening possible
KOSHIRI SAFETY	yes
POLARIZATION/CODING	incorrect insertion force > 225 N
CPA SYSTEM	operating force < 30 N
HVIL SYSTEM	minimum 1.0 mm (nominal 2.0 mm), leading
VALIDATION NORMS	compliant with several automotive test specifications

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 , 6.0 mm ² with different pole numbers
CONTACT CARRIER CODINGS	A, B
CONFIGURATION	customer specific wire configuration possible on request
SCREW TYPE	M4



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40 4+2 FEMALE CONNECTOR

Page 80



HPS40 4+2 MALE CONNECTOR 180° BLADE

SYSTEM NUMBER	809-490-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	blade
PRODUCT SPECIFICATION	EPS-100139
APPLICATIONS	3-phase charging

TECHNICAL PRODUCT INFORMATION

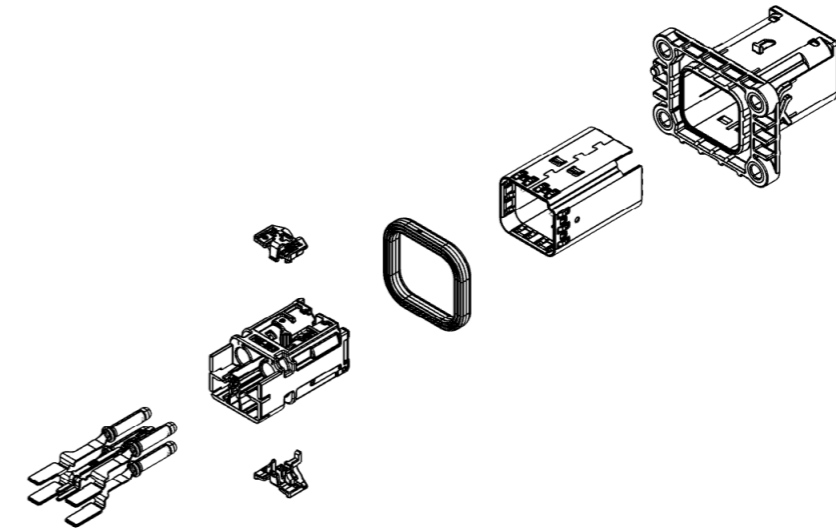
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	4 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	38 A at 80° C (4 x 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 2 MHz < 2.5 mΩ/m until 30 MHz < 5 mΩ/m > 65 dB (30 MHz to 300 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 (first fixation point at < 200 mm)
MATING/UNMATING FORCE	< 75 N
SECONDARY LOCK SYSTEM	activating force < 40 N, no unintentional opening possible
KOSHIRI SAFETY	yes
POLARIZATION/CODING	incorrect insertion force > 225 N
CPA SYSTEM	operating force < 30 N
HVIL SYSTEM	minimum 1.0 mm (nominal 2.0 mm), leading
VALIDATION NORMS	compliant with several automotive test specifications

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

CONTACT CARRIER CODINGS	A, B
CONFIGURATION	customer specific blade configuration possible on request
SCREW TYPE	M4



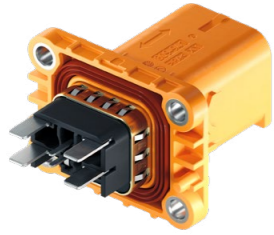
DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40 4+2 FEMALE CONNECTOR

Page 80



HPS40 4+2 MALE CONNECTOR 180° BLADE HP

SYSTEM NUMBER	810-343-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	high performance blade
PRODUCT SPECIFICATION	EPS-100139
APPLICATIONS	3-phase charging

TECHNICAL PRODUCT INFORMATION

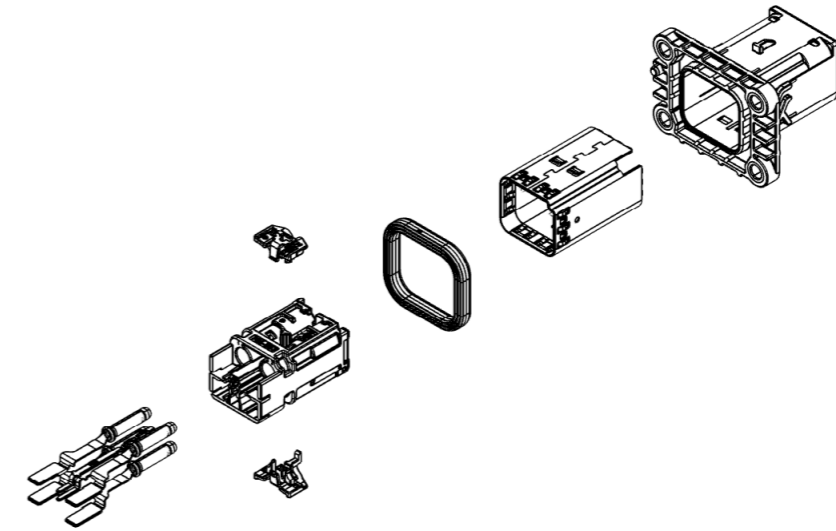
CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	4 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	49 A at 80° C (4 x 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 2 MHz < 2.5 mΩ/m until 30 MHz < 5 mΩ/m > 65 dB (30 MHz to 300 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 (first fixation point at < 200 mm)
MATING/UNMATING FORCE	< 75 N
SECONDARY LOCK SYSTEM	activating force < 40 N, no unintentional opening possible
KOSHIRI SAFETY	yes
POLARIZATION/CODING	incorrect insertion force > 225 N
CPA SYSTEM	operating force < 30 N
HVIL SYSTEM	minimum 1.0 mm (nominal 2.0 mm), leading
VALIDATION NORMS	compliant with several automotive test specifications

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

CONTACT CARRIER CODINGS	A, B
CONFIGURATION	customer specific blade configuration possible on request
SCREW TYPE	M4



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL

MATING CONNECTOR

HPS40 4+2 FEMALE CONNECTOR

Page 80



HPS Distributor

INTRODUCTION

The electrification of the mobility sector requires, among other things, an efficient connection of current-carrying lines in high-voltage vehicle electrical systems. For example, it becomes increasingly necessary to distribute power to two HV units. With our HPS Distributors, this can be achieved safely.

The product design of our power distributors impresses with its extremely compact construction and its high scalability – due to the use of standard components, we can cover a wide range of cross-sections.

HPS Y-DISTRIBUTOR MCC

SYSTEM NUMBER	809-852-...00
CONNECTION TYPE	multicore cable
PRODUCT SPECIFICATION	EPS-100130
PROCESS SPECIFICATION	EVS-100130
APPLICATIONS	power distribution

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
OPERATING CONDITION	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	88 A at 80° C (6.0 mm ²), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXD (assembled)
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 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)
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

CONNECTION	ultrasonic welding
------------	--------------------

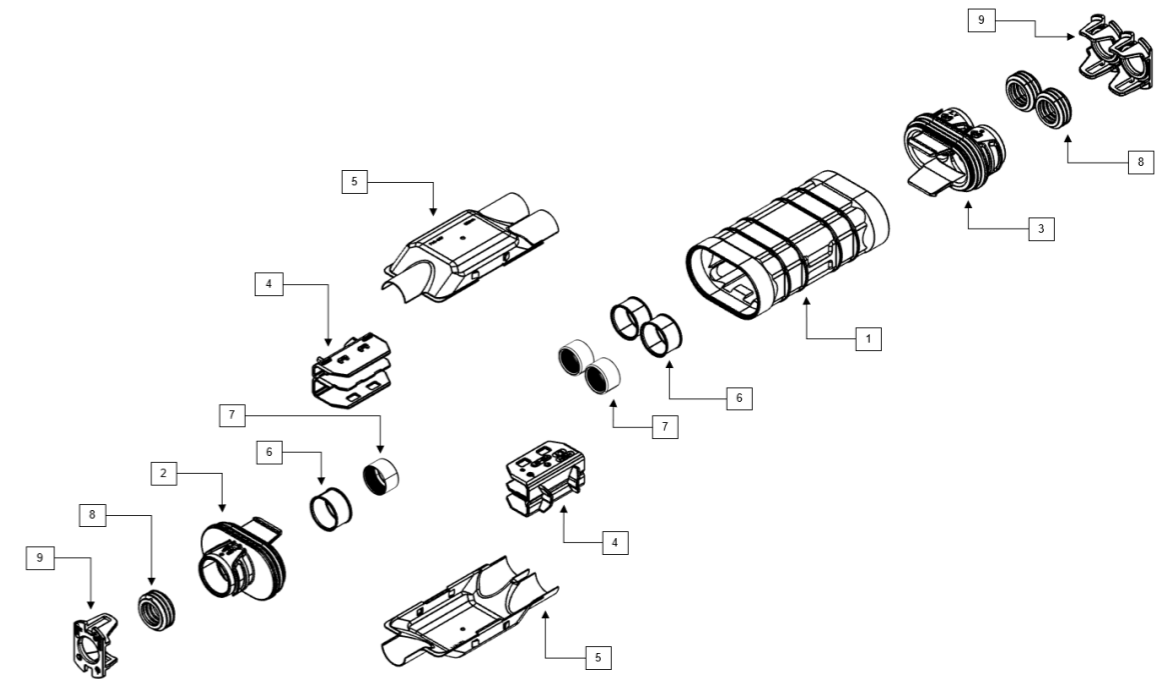
CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	4.0 mm ² , 6.0 mm ²
---------------------	---



DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS DISTRIBUTOR SHIELDHOUSING	706-669-...	•	
2	HPS DISTRIBUTOR CABLEHOUSING ONE	809-853-501	•	
3	HPS DISTRIBUTOR CABLEHOUSING TWO	809-853-502	•	
4	HPS DISTRIBUTOR INSULATOR	706-671-...	•	
5	HPS DISTRIBUTOR SHIELD Y MCC	710-097-501	•	
6	HPS DISTRIBUTOR SHIELDSLEEVE MCC	710-099-501	•	
7	HPS40-2 STRESS RELIEF MCC	709-841-...	•	
8	HPS40-2 CABLE SEAL MCC	709-113-...	•	
9	HPS DISTRIBUTOR CAP MCC	706-668-...	•	
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

HPS Y-DISTRIBUTOR SCC

SYSTEM NUMBER	809-852-...00
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100130
PROCESS SPECIFICATION	EVS-100131
APPLICATIONS	power distribution

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	88 A at 80° C (6.0 mm ²), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXD (assembled)
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 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)
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

CONNECTION	ultrasonic welding
------------	--------------------

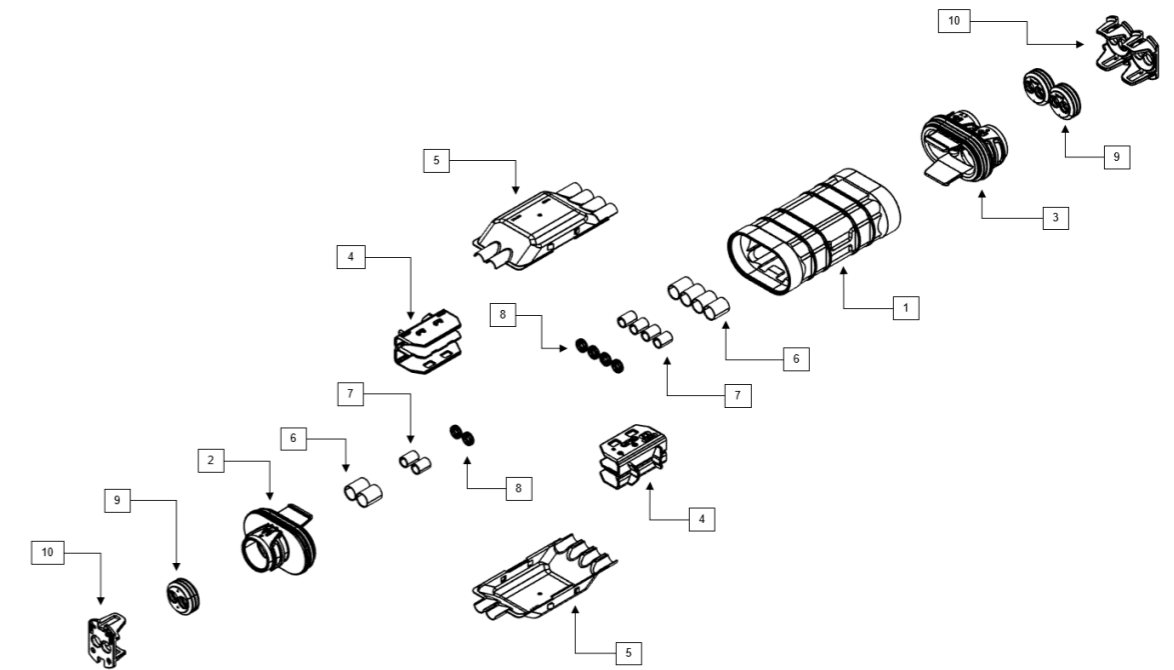
CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	4.0 mm ² , 6.0 mm ²
---------------------	---



DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS DISTRIBUTOR SHIELDHOUSING	706-669-...	•	
2	HPS DISTRIBUTOR CABLEHOUSING ONE	809-853-501	•	
3	HPS DISTRIBUTOR CABLEHOUSING TWO	809-853-502	•	
4	HPS DISTRIBUTOR INSULATOR	706-671-...	•	
5	HPS DISTRIBUTOR SHIELD Y SCC	710-097-511	•	
6	HPS DISTRIBUTOR SHIELDSLEEVE SCC	710-099-511	•	
7	HPS40-2 STRESS RELIEF SCC	710-195-502 (4.0 MM ²), 710-671-501 (6.0 MM ²)	•	
8	HPS40-2 X-RING	710-675-501 (6.0MM ²)	•	
9	HPS40-2 CABLE SEAL SCC	709-972-...	•	
10	HPS DISTRIBUTOR CAP SCC	706-668-...	•	
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

HPS H-DISTRIBUTOR MCC

SYSTEM NUMBER	809-852-...00
CONNECTION TYPE	multicore cable
PRODUCT SPECIFICATION	EPS-100130
PROCESS SPECIFICATION	EVS-100130
APPLICATIONS	power distribution

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	88 A at 80° C (6.0 mm ²), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXD (assembled)
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 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)
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

CONNECTION	ultrasonic welding
------------	--------------------

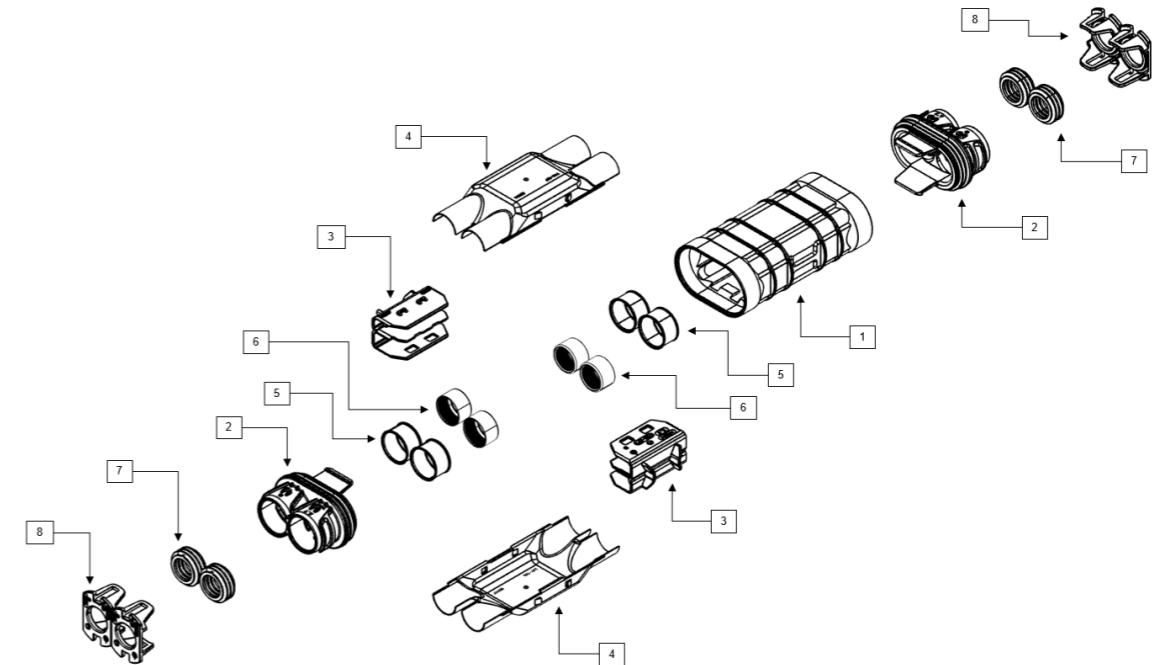
CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	4.0 mm ² , 6.0 mm ²
---------------------	---



DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS DISTRIBUTOR SHIELDHOUSING	706-669-...	•	
2	HPS DISTRIBUTOR CABLEHOUSING TWO	809-853-502	•	
3	HPS DISTRIBUTOR INSULATOR	706-671-...	•	
4	HPS DISTRIBUTOR SHIELD H MCC	710-197-501	•	
5	HPS DISTRIBUTOR SHIELDSLEEVE MCC	710-099-501	•	
6	HPS40-2 STRESS RELIEF MCC	709-841-...	•	
7	HPS40-2 CABLE SEAL MCC	709-113-...	•	
8	HPS DISTRIBUTOR CAP MCC	706-668-...	•	
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

HPS H-DISTRIBUTOR SCC

SYSTEM NUMBER	809-852-...00
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100130
PROCESS SPECIFICATION	EVS-100131
APPLICATIONS	power distribution

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	88 A at 80° C (6.0 mm ²), see deratings product specification
IP-DEGREE OF PROTECTION	IPXXD (assembled)
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 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)
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

CONNECTION	ultrasonic welding
------------	--------------------

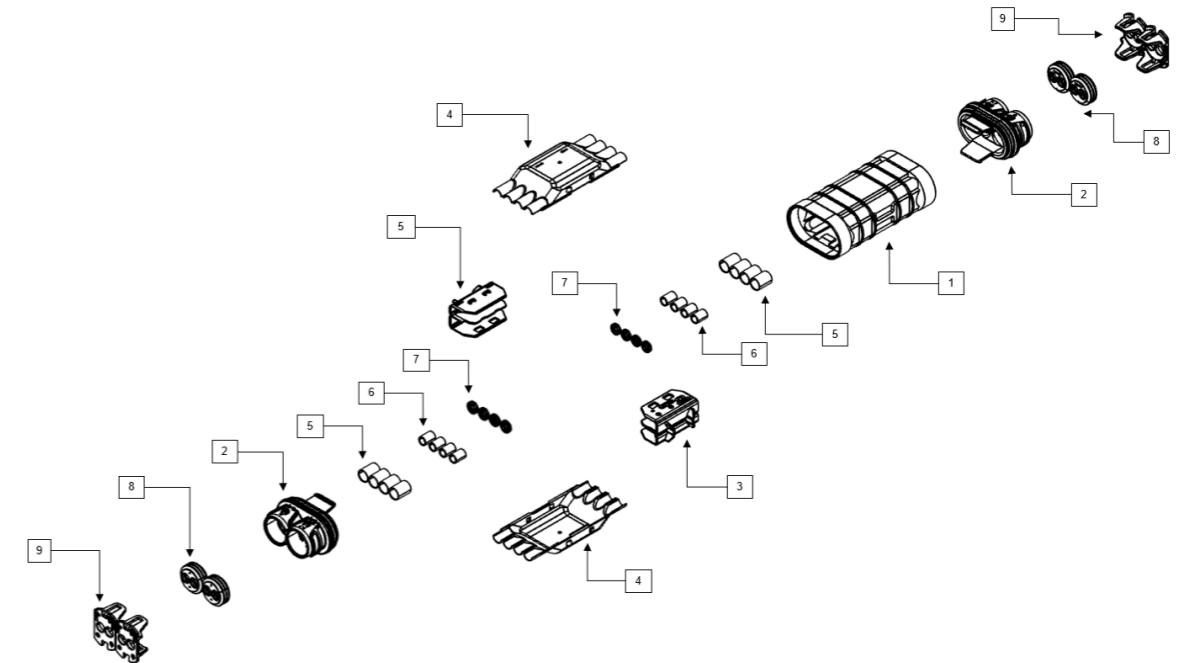
CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	4.0 mm ² , 6.0 mm ²
---------------------	---



DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS DISTRIBUTOR SHIELDHOUSING	706-669-...	•	
2	HPS DISTRIBUTOR CABLEHOUSING TWO	809-853-502	•	
3	HPS DISTRIBUTOR INSULATOR	706-671-...	•	
4	HPS DISTRIBUTOR SHIELD Y SCC	710-197-511	•	
5	HPS DISTRIBUTOR SHIELDSLEEVE SCC	710-099-511	•	
6	HPS40-2 STRESS RELIEF SCC	710-195-502 (4.0 MM ²), 710-671-501 (6.0 MM ²)	•	
7	HPS40-2 X-RING	710-675-501 (6.0MM ²)	•	
8	HPS40-2 CABLE SEAL SCC	709-972-...	•	
9	HPS DISTRIBUTOR CAP SCC	706-668-...	•	
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

HPS In-Line Connector

INTRODUCTION

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.

HPS IN-LINE CONNECTOR MALE MCC WITH HVIL



SYSTEM NUMBER	809-999-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	multicore cable
PRODUCT SPECIFICATION	EPS-100137
PROCESS SPECIFICATION	EVS-100113
APPLICATIONS	inline connection

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	56 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 < 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
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

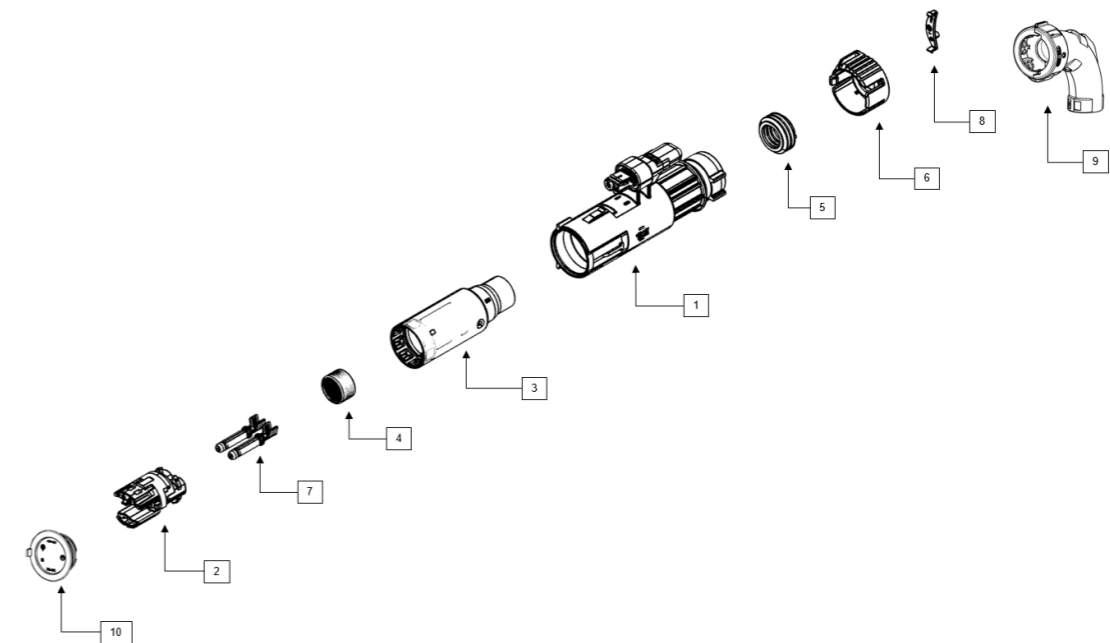
CONTACT SYSTEM	HCT4 (4.0 mm round terminal), Ag, crimped
MATERIAL/SURFACE	Cu-Leg., CuNiSi, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	2.5 mm ² , 4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS IN-LINE LOCKING DEVICE WITH HVIL	810-000-501	•	
2	HPS IN-LINE CONTACT CARRIER MCC	809-365-...	•	
3	HPS IN-LINE SHIELDING SLEEVE MCC	810-001-501	•	
4	HPS40-2 STRESS RELIEF MCC	709-841-...	•	
5	HPS40-2 CABLE SEAL MCC	709-113-...	•	
6	HPS40-2 COVER CAP MCC	706-430-...	•	
7	HCT4 SHORT TERMINAL	709-633-...	•	
8	HPS40-2 CODING CLIP	706-505-...		•
9	HPS40-2 90° ANGLE CAP	706-506-...		•
10	HPS40-2 PROTECTION CAP MALE	706-673-...		•
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

MATING CONNECTOR

HPS IN-LINE FEMALE CONNECTOR

Page 108, 110

HPS IN-LINE CONNECTOR MALE SCC WITH HVIL



SYSTEM NUMBER	809-999-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100137
PROCESS SPECIFICATION	EVS-100132
APPLICATIONS	inline connection

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL optional)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 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 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 < 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 (without fixation point)
VIBRATION STRENGTH 4	according to LV214/215 - PG17 (first fixation point at < 200 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
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

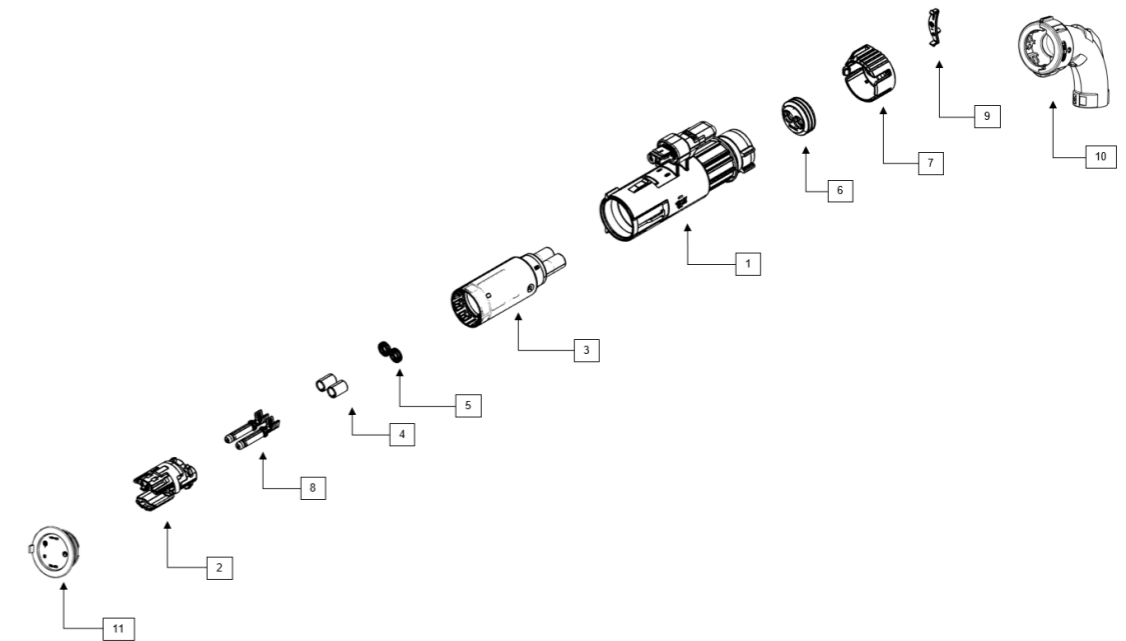
CONTACT SYSTEM	HCT4 (4.0 mm round terminal), Ag, crimped
MATERIAL/SURFACE	Cu-Leg., CuNiSi, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS IN-LINE LOCKING DEVICE WITH HVIL	810-000-501	•	
2	HPS IN-LINE CONTACT CARRIER SCC	809-365-...	•	
3	HPS IN-LINE SHIELDING SLEEVE SCC	810-001-...	•	
4	HPS40-2 STRESS RELIEF SCC	710-195-502 (4.0 MM ²), 710-671-501 (6.0 MM ²)	•	
5	HPS40-2 X-RING	710-675-501 (6.0MM ²)	•	
6	HPS40-2 CABLE SEAL SCC	709-972-...	•	
7	HPS40-2 COVER CAP SCC	706-822-...	•	
8	HCT4 SHORT TERMINAL	709-633-...	•	
9	HPS40-2 CODING CLIP	706-505-...		•
10	HPS40-2 90° ANGLE CAP	706-506-503		•
11	HPS40-2 PROTECTION CAP MALE	706-673-501		•
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

MATING CONNECTOR

HPS IN-LINE FEMALE CONNECTOR

Page 108, 110

HPS IN-LINE CONNECTOR MALE MCC WITHOUT HVIL



SYSTEM NUMBER	809-999-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	multicore cable
PRODUCT SPECIFICATION	EPS-100137
PROCESS SPECIFICATION	EVS-100113
APPLICATIONS	inline connection

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage)
OPERATING CONDITION	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	56 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 < 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
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

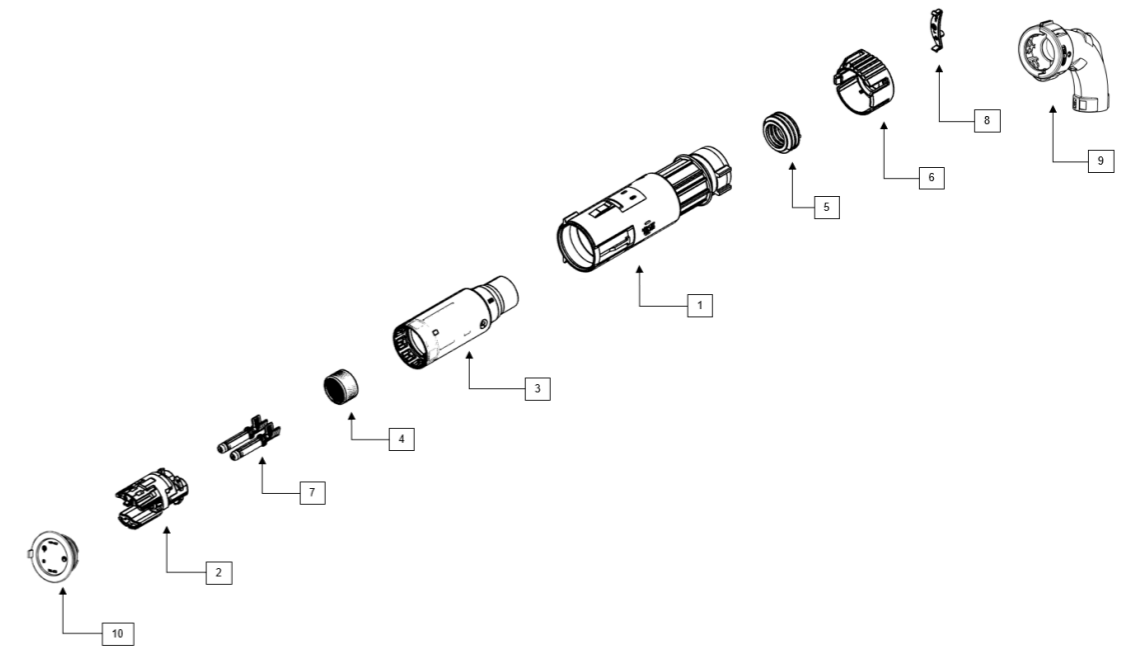
CONTACT SYSTEM	HCT4 (4.0 mm round terminal), Ag, crimped
MATERIAL/SURFACE	Cu-Leg., CuNiSi, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	2.5 mm², 4.0 mm², 6.0 mm²
CONTACT CARRIER CODINGS	A, B, C, D

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS IN-LINE LOCKING DEVICE	706-880-502	•	
2	HPS IN-LINE CONTACT CARRIER MCC	809-365-...	•	
3	HPS IN-LINE SHIELDING SLEEVE MCC	810-001-501	•	
4	HPS40-2 STRESS RELIEF MCC	709-841-...	•	
5	HPS40-2 CABLE SEAL MCC	709-113-...	•	
6	HPS40-2 COVER CAP MCC	706-430-...	•	
7	HCT4 SHORT TERMINAL	709-633-...	•	
8	HPS40-2 CODING CLIP	706-505-...		•
9	HPS40-2 90° ANGLE CAP	706-506-503		•
10	HPS40-2 PROTECTION CAP MALE	706-673-501		•
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

MATING CONNECTOR

HPS40-2 2+2 FEMALE CONNECTOR

HPS IN-LINE CONNECTOR MALE SCC WITHOUT HVIL



SYSTEM NUMBER	809-999-...00
GENDER	male
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100137
PROCESS SPECIFICATION	EVS-100132
APPLICATIONS	inline connection

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage)
OPERATING CONDITION	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 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 < 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 (without fixation point)
VIBRATION STRENGTH 4	according to LV214/215 - PG17 (first fixation point at < 200 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
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

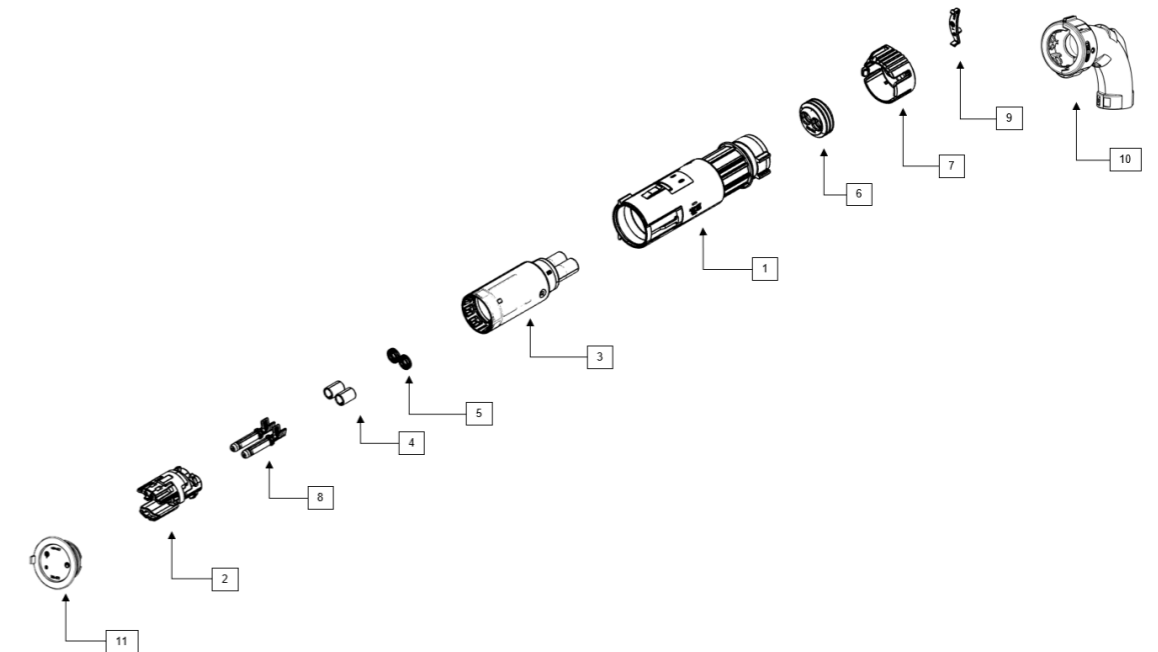
CONTACT SYSTEM	HCT4 (4.0 mm round terminal), Ag, crimped
MATERIAL/SURFACE	Cu-Leg., CuNiSi, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS IN-LINE LOCKING DEVICE	706-880-502	•	
2	HPS IN-LINE CONTACT CARRIER SCC	809-365-...	•	
3	HPS IN-LINE SHIELDING SLEEVE SCC	810-001-...	•	
4	HPS40-2 STRESS RELIEF SCC	710-195-502 (4.0 MM ²), 710-671-501 (6.0 MM ²)	•	
5	HPS40-2 X-RING	710-675-501 (6.0MM ²)	•	
6	HPS40-2 CABLE SEAL SCC	709-972-...	•	
7	HPS40-2 COVER CAP SCC	706-822-...	•	
8	HCT4 SHORT TERMINAL	709-633-...	•	
9	HPS40-2 CODING CLIP	706-505-...		•
10	HPS40-2 90° ANGLE CAP	706-506-503		•
11	HPS40-2 PROTECTION CAP MALE	706-673-501		•
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

MATING CONNECTOR

HPS IN-LINE FEMALE CONNECTOR

Page 36, 38

HPS IN-LINE CONNECTOR FEMALE MCC WITH HVIL



SYSTEM NUMBER	810-385-...00
GENDER	female
INTERFACE	EMEA
CONNECTION TYPE	multicore cable
PRODUCT SPECIFICATION	EPS-100096
PROCESS SPECIFICATION	EVS-100096
APPLICATIONS	inline connection

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL with additional SealStar 1.2 connector)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
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 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
VALIDATION NORMS	compliant with several automotive test specifications

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

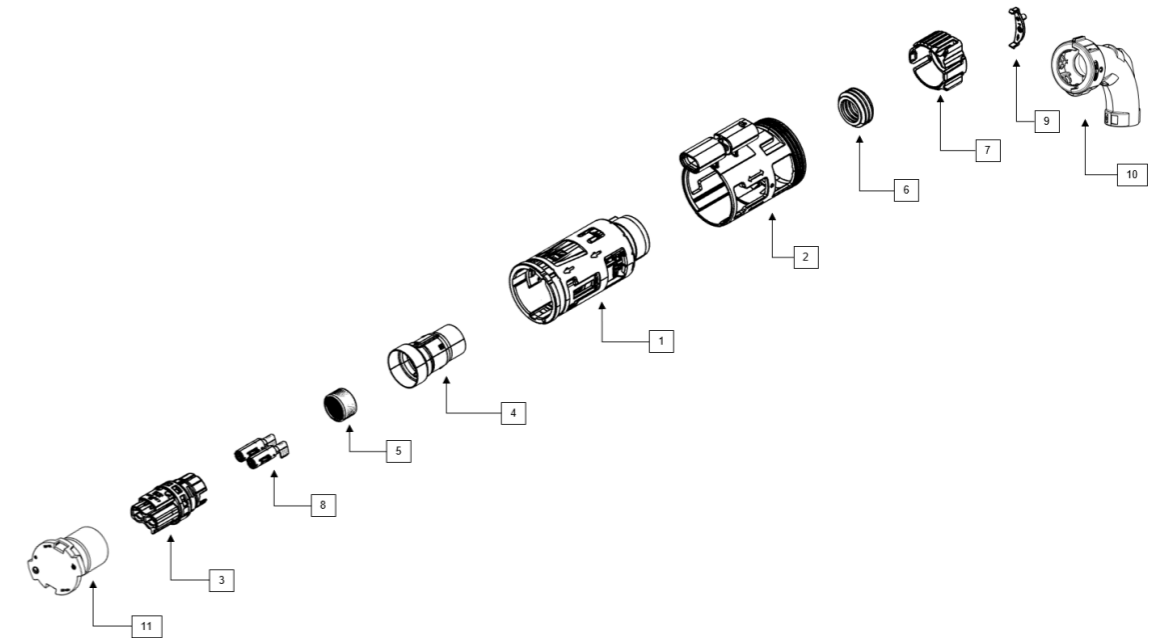
CABLE CROSS SECTION	2.5 mm ² , 4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D, Z

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS40-2 LOCKING DEVICE	807-656-...	•	
2	HPS IN-LINE CPA COVER	810-287-501	•	
3	HPS40-2 FEMALE CONTACT CARRIER	807-657-...	•	
4	HPS40-2 SHIELDING SLEEVE MCC	709-840-501	•	
5	HPS40-2 STRESS RELIEF MCC	709-841-...	•	
6	HPS40-2 CABLE SEAL MCC	709-113-...	•	
7	HPS40-2 COVER CAP MCC	706-430-...	•	
8	HCT4 TERMINAL	709-427-...	•	
9	HPS40-2 CODING CLIP	706-505-...		•
10	HPS40-2 90° ANGLE CAP	706-506-503		•
11	HPS40-2 PROTECTION CAP	706-672-501		•

* ... different indices depending on the used variant (see single part drawings)

* ... shielded high voltage cable (see possible cable suppliers in the process specification)



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

MATING CONNECTOR

HPS IN-LINE MALE CONNECTOR

Page 100, 102

HPS IN-LINE CONNECTOR FEMALE SCC WITH HVIL



SYSTEM NUMBER	810-385-...00
GENDER	female
INTERFACE	EMEA
CONNECTION TYPE	singlecore cable
PRODUCT SPECIFICATION	EPS-100096
PROCESS SPECIFICATION	EVS-100111
APPLICATIONS	inline connection

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage) + 2 (HVIL with additional SealStar 1.2 Connector)
OPERATING CONDITION	1,000 VDC
VOLTAGE CLASS	class B according ISO 6469-3:2011 60 VDC < U ≤ 1,000 VDC 25 VAC < U _{eff} ≤ 707 VAC (15-150 Hz)
AMBIENT CONDITION	-40° C to +140° C
MAXIMUM ALTITUDE	4,000 m
MAXIMUM CURRENT LOAD	63 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 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 (without fixation point)
VIBRATION STRENGTH 4	according to LV214/215 - PG17 (first fixation point at < 200 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
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

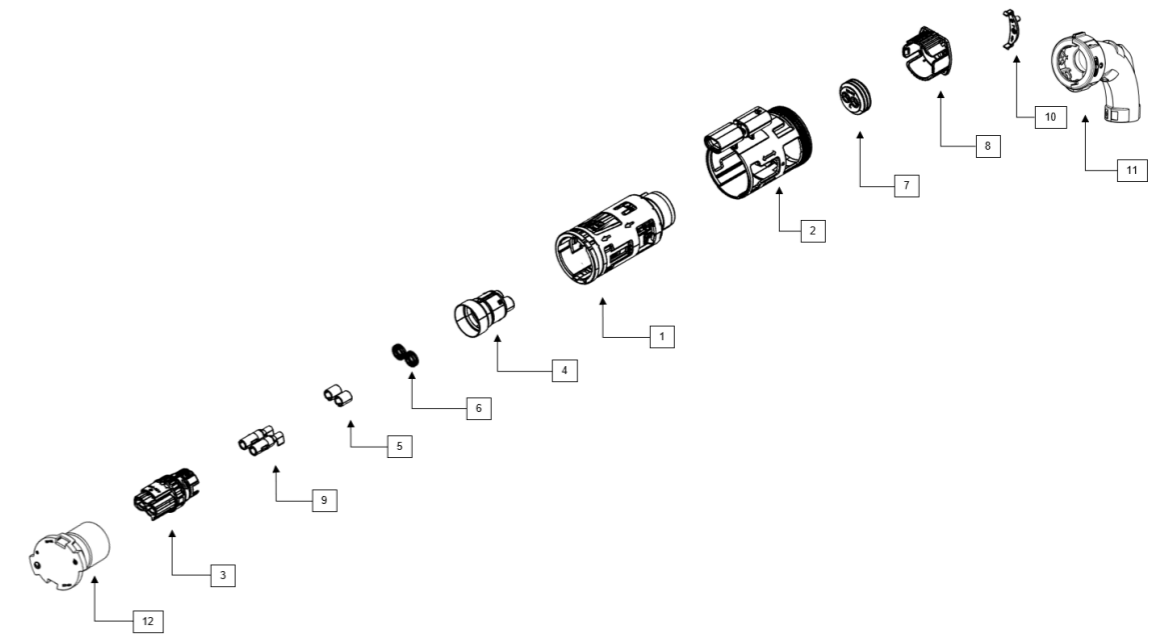
CONTACT SYSTEM	HCT4 (4.0 mm round terminal), Ag, crimped
MATERIAL/SURFACE	Cu-Leg., CuNiSi, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	4.0 mm ² , 6.0 mm ²
CONTACT CARRIER CODINGS	A, B, C, D, Z

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS40-2 LOCKING DEVICE	807-656-...	•	
2	HPS IN-LINE CPA COVER	810-287-501	•	
3	HPS40-2 FEMALE CONTACT CARRIER	807-657-...	•	
4	HPS40-2 SHIELDING SLEEVE SCC	710-161-...	•	
5	HPS40-2 STRESS RELIEF SCC	710-195-502 (4.0 MM ²), 710-671-501 (6.0 MM ²)	•	
6	HPS40-2 X-RING	710-675-501 (6.0MM ²)	•	
7	HPS40-2 CABLE SEAL SCC	709-972-...	•	
8	HPS40-2 COVER CAP SCC	706-822-...	•	
9	HCT4 TERMINAL	709-427-...	•	
10	HPS40-2 CODING CLIP	706-505-...		•
11	HPS40-2 90° ANGLE CAP	706-506-503		•
12	HPS40-2 PROTECTION CAP	706-672-501		•
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

- ▶ PRODUCT SPECIFICATION
- ▶ PROCESS SPECIFICATION
- ▶ SYSTEM DRAWING
- ▶ 3D SPACE MODEL
- ▶ SINGLE PART DRAWINGS

MATING CONNECTOR

HPS IN-LINE MALE CONNECTOR

Page 100, 102

HPS IN-LINE CONNECTOR PLUS MALE MCC



SYSTEM NUMBER	810-480-...03
GENDER	male
INTERFACE	PLUS
CONNECTION TYPE	multicore cable
PRODUCT SPECIFICATION	in progress
PROCESS SPECIFICATION	EVS-100139
APPLICATIONS	inline connection

TECHNICAL PRODUCT INFORMATION

CURRENT CLASS	current class 1 and 2 connector
NUMBER OF PINS	2 (high voltage)
OPERATING CONDITION	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	56 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 < 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
VALIDATION NORMS	compliant with several automotive test specifications

CONTACT SYSTEM INFORMATION

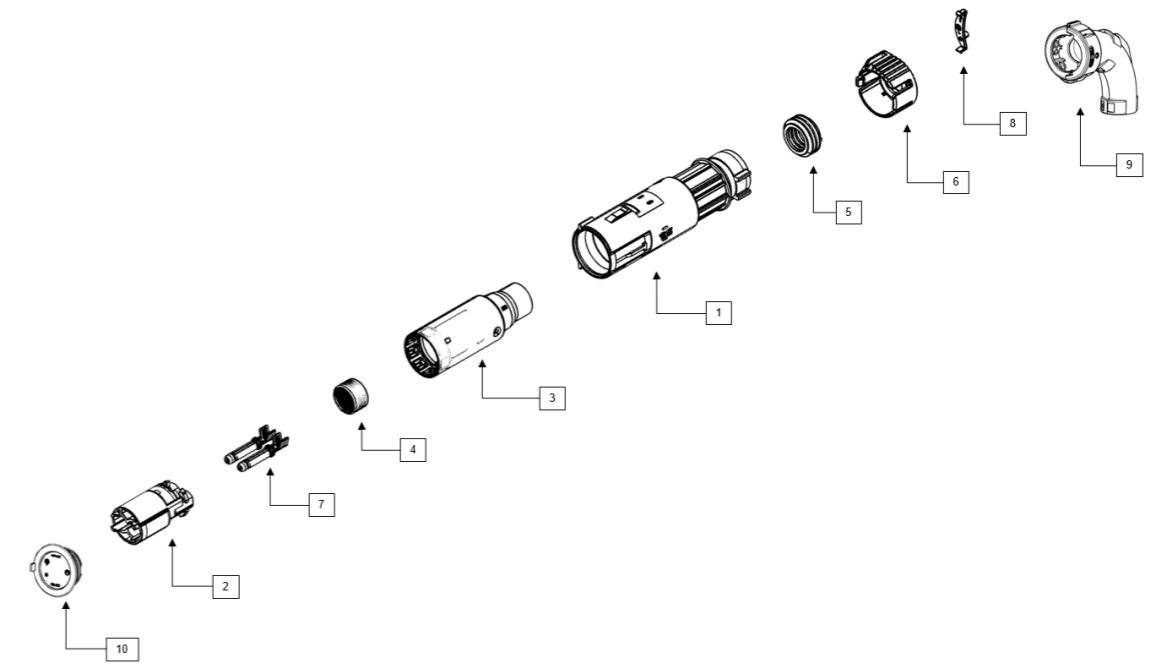
CONTACT SYSTEM	HCT4 (4.0 mm round terminal), Ag, crimped
MATERIAL/SURFACE	Cu-Leg., CuNiSi, Ag
CONNECTION	crimped
MATING CYCLES	maximum 50 cycles

CUSTOMER SPECIFIC INFORMATION

CABLE CROSS SECTION	4.0 mm², 6.0 mm²
CONTACT CARRIER CODINGS	A, B, C, D

DESCRIPTION SINGLE PARTS

			REQUIRED	OPTIONAL
1	HPS IN-LINE LOCKING DEVICE	706-880-503	•	
2	HPS IN-LINE CONTACT CARRIER MCC	810-478-...	•	
3	HPS IN-LINE SHIELDING SLEEVE MCC	810-481-501	•	
4	HPS40-2 STRESS RELIEF MCC	709-841-...	•	
5	HPS40-2 CABLE SEAL MCC	709-113-...	•	
6	HPS40-2 COVER CAP MCC	706-430-...	•	
7	HCT4 SHORT TERMINAL	709-633-...	•	
8	HPS40-2 CODING CLIP	706-505-...		•
9	HPS40-2 90° ANGLE CAP	706-506-503		•
10	HPS40-2 PROTECTION CAP MALE	706-673-501		•
*	... different indices depending on the used variant (see single part drawings)			
*	... shielded high voltage cable (see possible cable suppliers in the process specification)			



DOWNLOADS

- ▶ PRODUCT SPECIFICATION | in progress
- ▶ PROCESS SPECIFICATION | in progress
- ▶ SYSTEM DRAWING | in progress
- ▶ 3D SPACE MODEL | in progress
- ▶ SINGLE PART DRAWINGS | in progress

MATING CONNECTOR

HPS40-2 PLUS FEMALE CONNECTOR

Get in Touch

If you are interested in our High Voltage products, contact our Technical Sales Manager Elisa-Maria Jussel.

More information and insights about Hirschmann Automotive can be found on our website or on our social media channels.

+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
shop.hirschmann-automotive.com

