



AMPHENOL PCD SHENZHEN



EXCEL | MATE

EXCEL MATE | METAL

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PRODUCT INTRODUCTION



When high-performance and increased safety are required in HEV, Amphenol PCD's **EXCEL | MATE** connectors fulfill the challenge.

HVSL Series is designed for various HEV applications, including power and signal interconnect solutions. Different versions are available, from 1 position to 6 positions and a rated current from 23A to 350A.

Product	HVSL 1200	HVSL 1000	HVSLP 1000	HVSL 800	HVSLP 800	HVSLS 800	HVSLS 8003	HVSLS 600	HVSL 60A	HVSL 63A	HVSL 633	HVSL 28A	HVSL 282	HVSL 362	HVSL 364	HVSL 365	HVSL 366
Position	2	1, 2, 3	2	2, 3	2	2	2	2, 3	1	2	3	3	2	2	4	5	6
Rated Voltage	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V	1000V
Rated Current	350A	250A	250A	200A	200A	180A	200A	120A	120A	40A	40A	32A	32A	95A	46A	40A	40A
HVIL	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Shielding	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Shell	Plastic	Plastic	Plastic	Plastic	Plastic	Metal	Metal	Metal	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic
IP67,IP6K9K	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Touch-Proof IP2XB	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Cable size mm ²	70 to 95	25 to 70	50 to 70	25 to 50	25 to 50	25 to 50	25 to 50	16 to 25	25	4 to 6	2.5 to 6	2.5 to 4	2.5 to 4	6 to 16	2.5 to 6	2.5 to 6	2.5 to 6
Cable type shielded wire	I	I	I	I	I	I	I	I	I	M	I	M	I	I	I	I	I

Cable type shielded wire

I: Individually / **M:** Multicore

EXCEL | MATE Metal: 2 PIN & 3 PIN CONNECTOR



EXCEL | MATE Metal

EXCEL | MATE Metal is a 2 pin and 3 pin connector with current carrying capacity from 80 to 120A and 16 to 25mm² crimping cable.

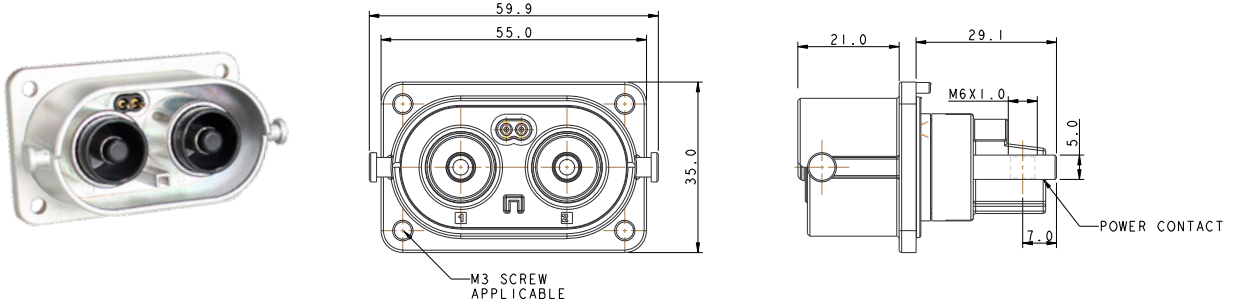
Specially designed for battery, inverters, junction boxes, power distribution boxes and others HEV devices' equipment.

KEY FEATURES

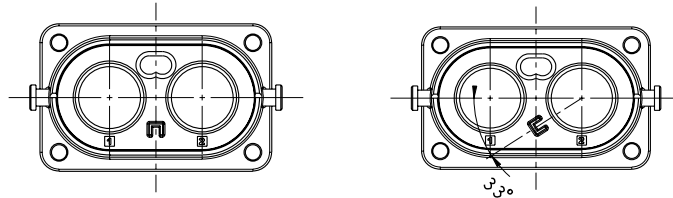
- Integrated internal HVIL
- Current rating up to 120A@ ambient temperature 70°C
- No tool required to unmate
- Sealing, IP67 (mated), IP6K9K
- Touch-proof, IP2XB
- Multiple coding positions
- CPA available

MECHANICAL	
Durability	≥ 50 mating cycles
Wire range	16 to 25 mm ² shielded wire
Insertion and extraction force	< 100N
Connection type	Copper bar
HVIL	Integrated
CPA	Available
ELECTRICAL	
Rated voltage	1000V DC
Rated current	120A Max @ ambient temperature 70°C
Insulator resistance	> 100MΩ
Dielectric withstand voltage	3000V AC
Shielding	360° from wire to device
ENVIRONMENTAL	
Sealing	IP67, IP6K9K (mated)
Touch-proof	IP2XB
Temperature range	-40°C to 125°C
Salt spray	96 hours
STANDARDS	
USCAR-2	
USCAR-37	
LV-215	
RoHS	
MATERIAL	
Terminals	Copper/copper alloy with silver plating
Housing	Zinc alloy

2 PIN RECEPTACLE

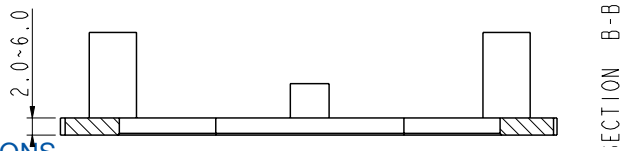
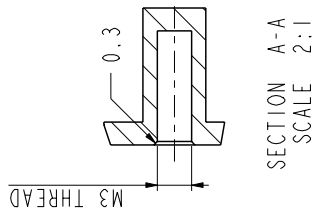


INSERT ORIENTATIONS

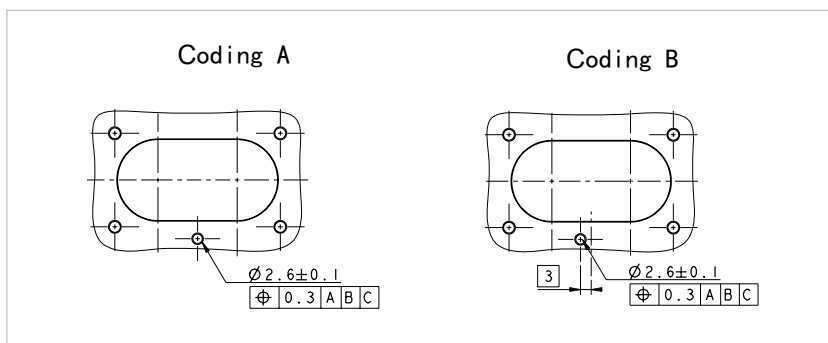


	Coding A	Coding B
P/N	HVSL S600 02 2 A	HVSL S600 02 2 B

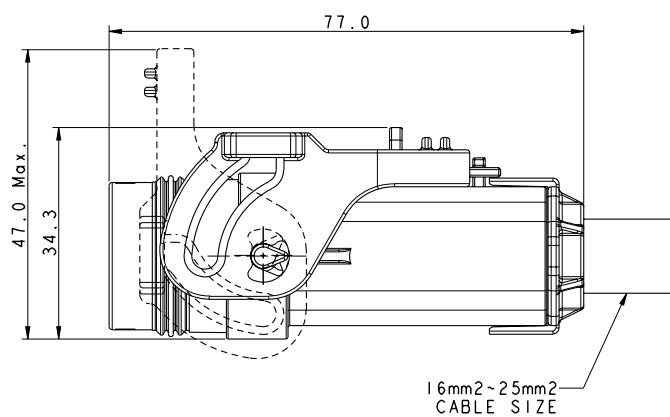
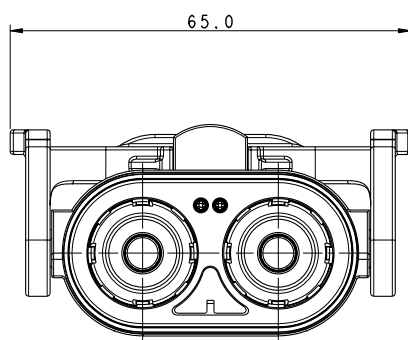
PANEL MOUNTING DIMENSIONS



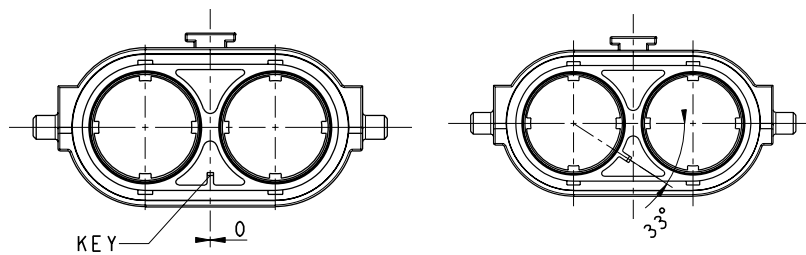
INSERT ORIENTATIONS



2 PIN STRAIGHT PLUG



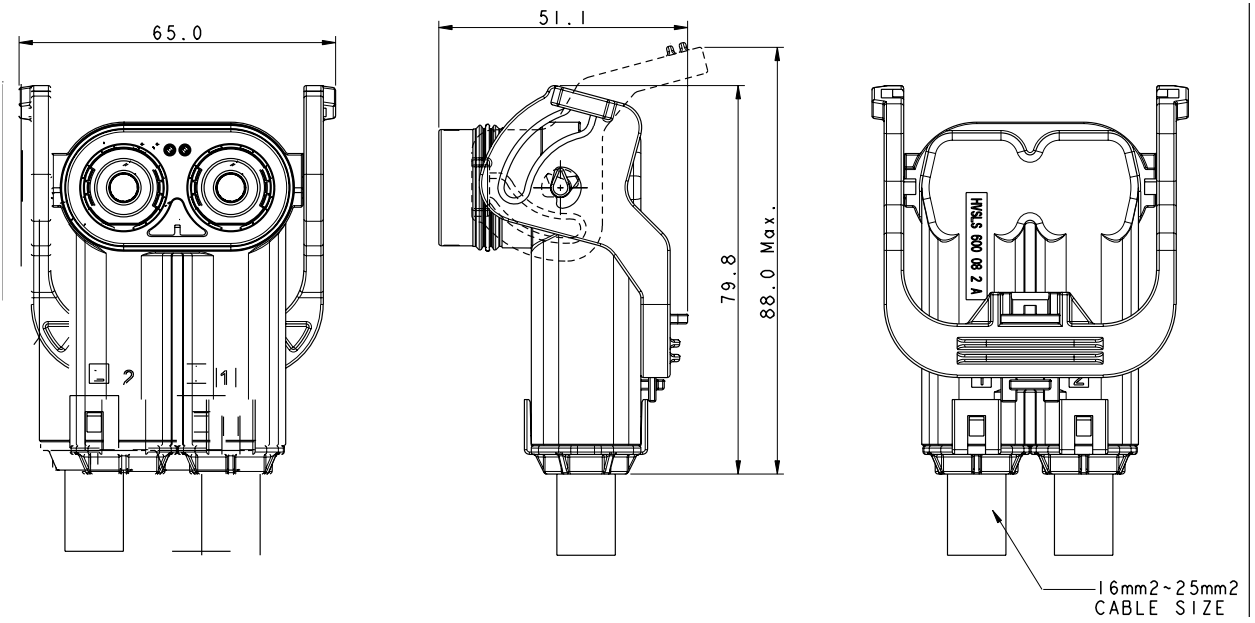
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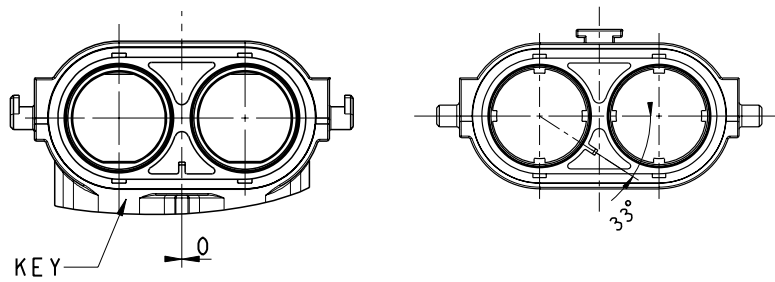
	Coding A	Coding B
P/N	HVSL S600 06 2 A	HVSL S600 06 2 B

Excel|Mate Metal (HVSL5 600)

2 PIN RIGHT ANGLE PLUG

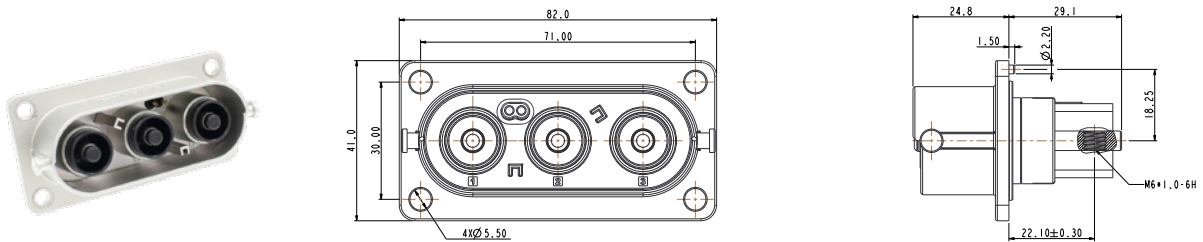


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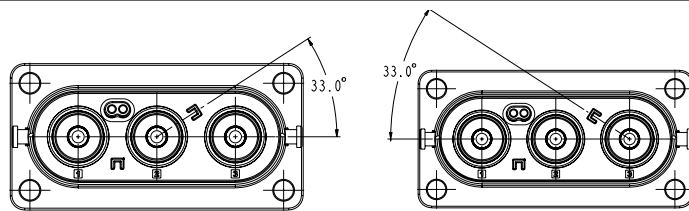


P/N	Coding A	Coding B
	HVSL5600 08 2 A	HVSL5600 08 2 B

3 PIN RECEPTACLE

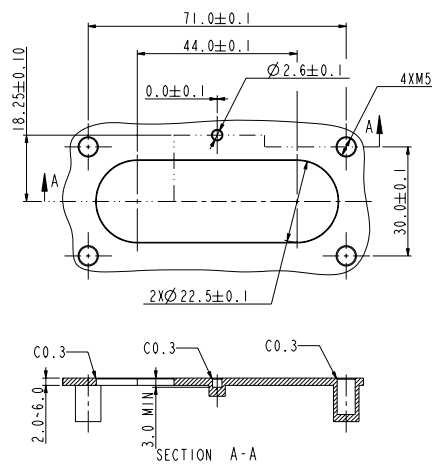


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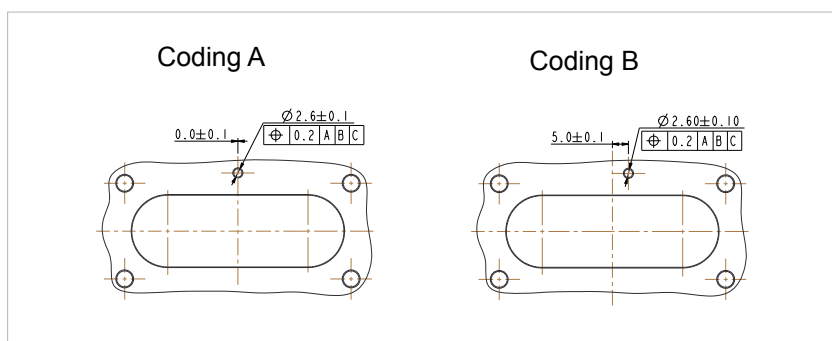


	Coding A	Coding B
P/N	HVSL600 02 3 A	HVSL600 02 3 B

PANEL MOUNTING DIMENSIONS

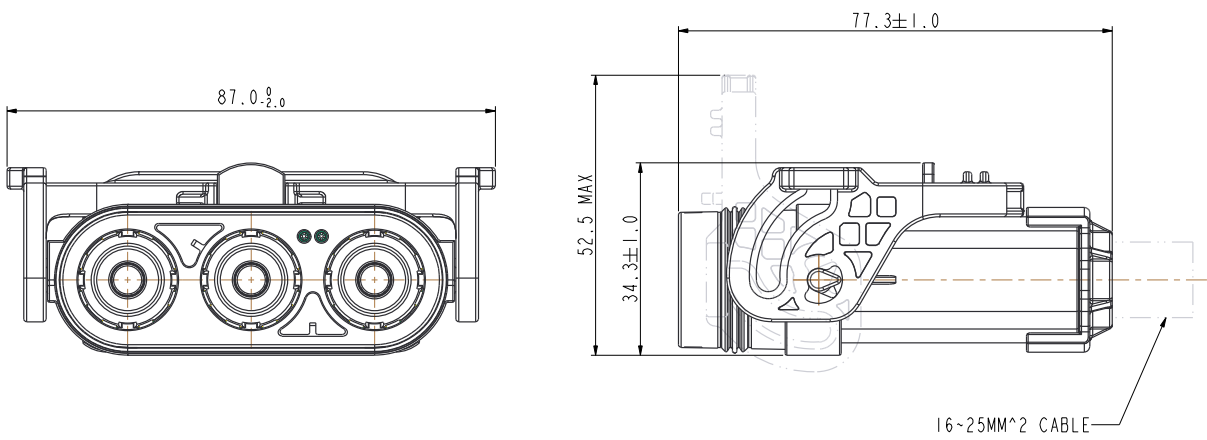


INSERT ORIENTATIONS

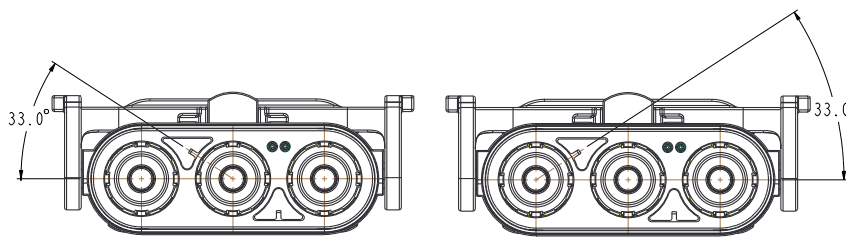


Excel|Mate Metal (HVSL S 600)

3 PIN STRAIGHT PLUG

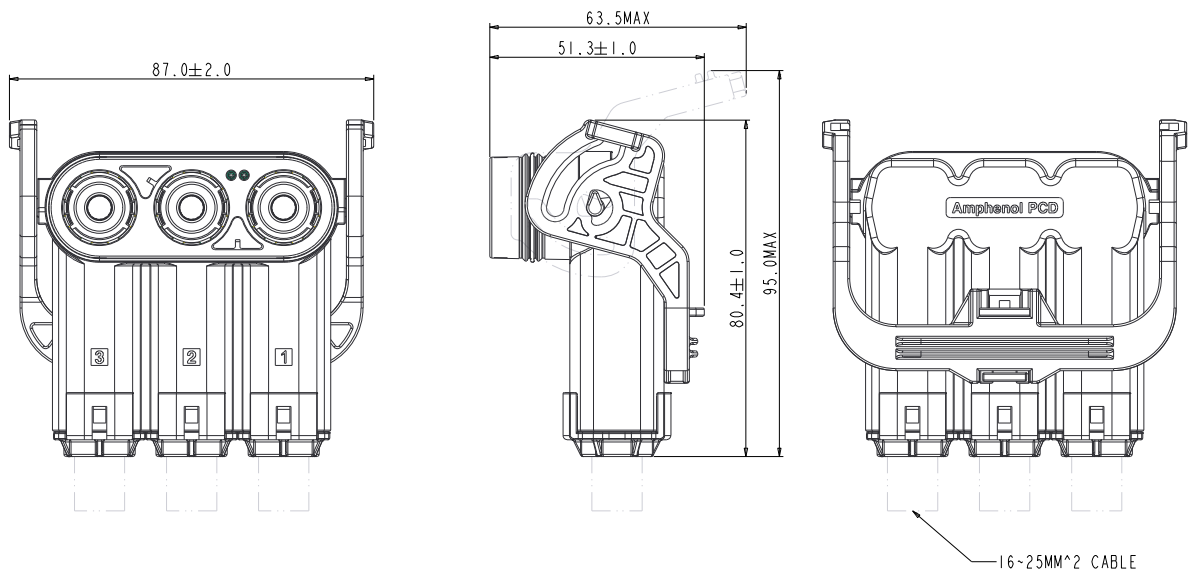


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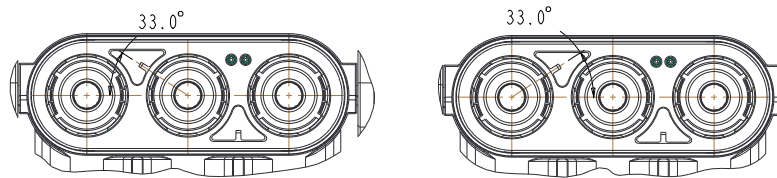


	Coding A	Coding B
P/N	HVSL S600 06 3 A	HVSL S600 06 3 B

3 PIN RIGHT ANGLE PLUG

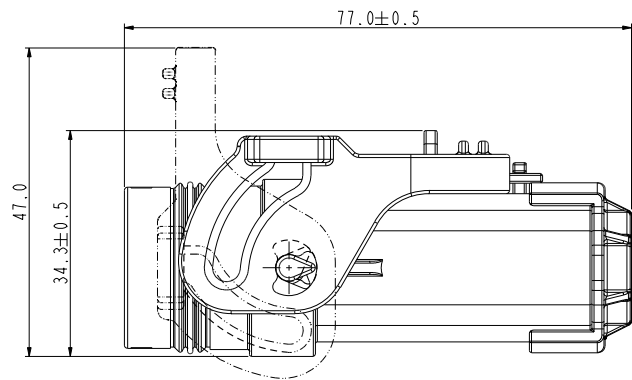
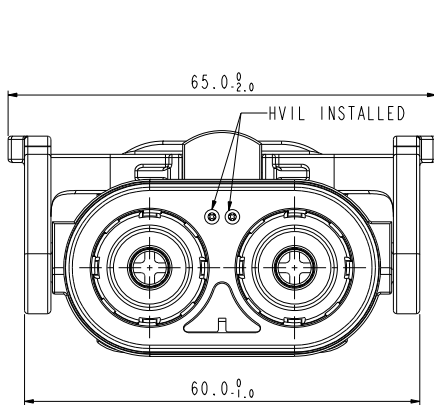


INSERT ORIENTATIONS



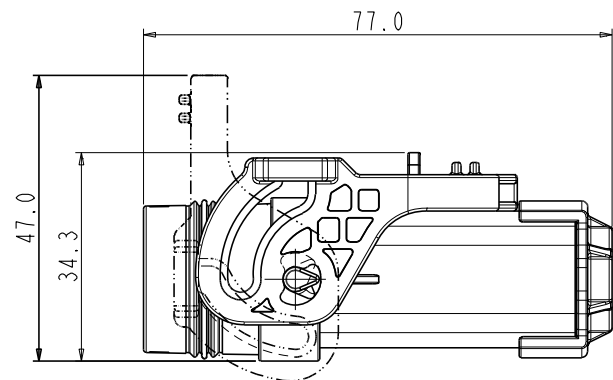
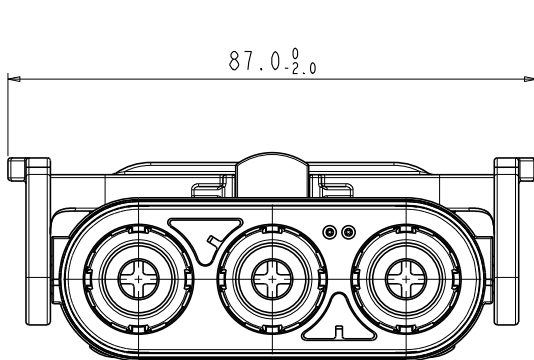
	Coding A	Coding B
P/N	HVLS600 08 2 A	HVLS600 08 2 B

DUMMY PLUG - 2PIN



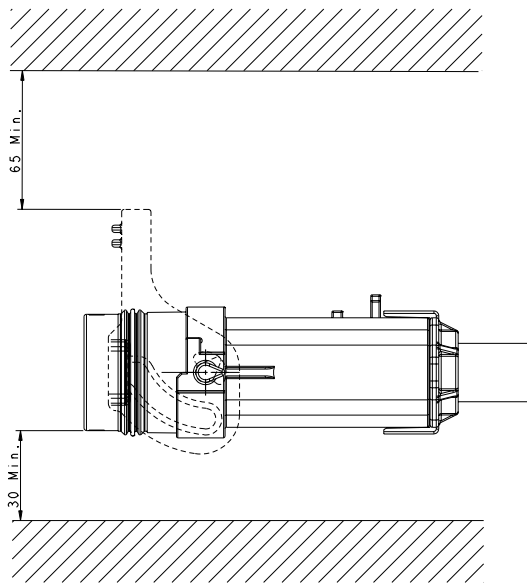
	HVSL S600	06	2	A	0	S1
Product type:	06: Straight plug					
Position:	2: 2 position					
Coding / Alternate position:	A: Coding A B: Coding B C: Coding C					
Interlock:	0: Without interlock 1: With interlock					
Dummy plug:	S1					

DUMMY PLUG - 3PIN



	HVSL600	06	3	A	0	S1
Product type:	06: Straight plug					
Position:	3: 3 position					
Coding / Alternate position:	A: Coding A B: Coding B					
Interlock:	0: Without interlock 1: With interlock					
Dummy plug:	S1					

INSTALLATION CLEARANCE



TOOL FOR RIGHT ANGLE PLUGS



Remark:

Customer needs to use fixture HVSLP033002 with Stanley torque wrench sleeve (purchased by the customer) for assembling the finish product HVSL S600082.

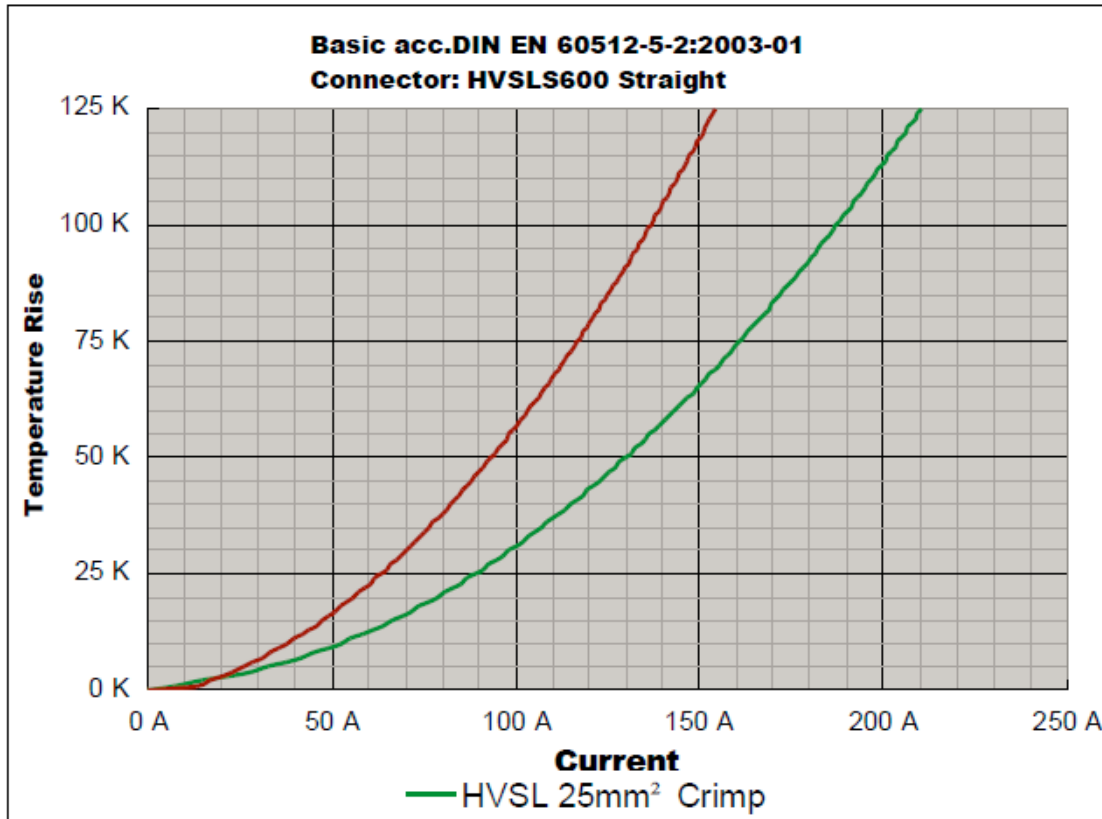
HOW TO ORDER: PLUG

	HVSL S600	06	2	A	0	16
Product type:	06: Straight plug 08: Right angle plug					
Position:	2: 2 position 3: 3 position					
Coding / Alternate position:	A: Coding A B: Coding B					
Interlock:	0: Without interlock 1: With interlock					
Cable size:	16: 16mm ² cable 25: 25mm ² cable					

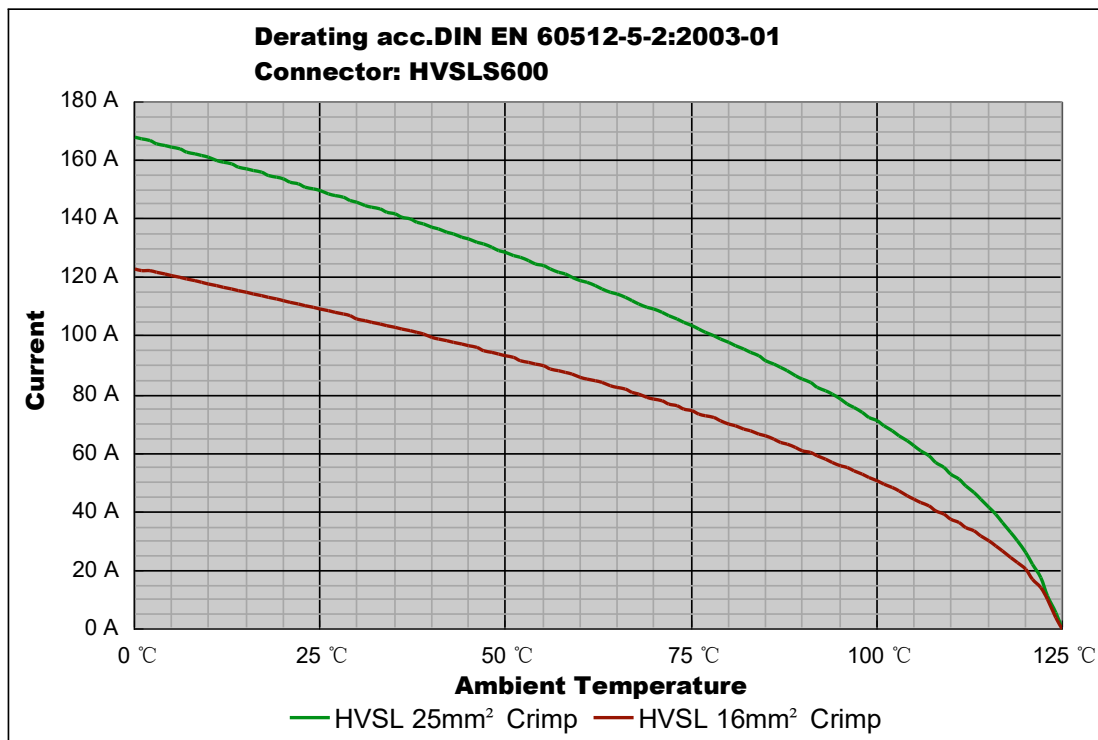
HOW TO ORDER: RECEPTACLE

	HVSL S600	02	2	A	0	H6
Product type:	02: Box mounted receptacle					
Position:	2: 2 position 3: 3 position					
Coding / Alternate position:	A: Coding A B: Coding B					
Interlock:	0: Without interlock 1: With interlock					
Cable size:	H6: OT terminal					

HVSL 600 | Temperature Rise



HVSL 600 | Derating Curve



Remark: tests carried out on the complete connector.

EXCEL | MATE Metal (HVSL S 800)

EXCEL | MATE Metal (HVSL S 800)



EXCEL | MATE Metal

EXCEL | MATE Metal is a 2 pin connector with a current carrying capacity of 180A and 25 to 50mm² crimping cable.

Specially designed for battery, inverters, junction boxes, power distribution boxes and others HEV devices' equipment.

KEY FEATURES

Integrated internal HVIL

Current rating up to 180A@ ambient temperature 70°C

No tool required to unmate

Sealing, IP67 (mated), IP6K9K

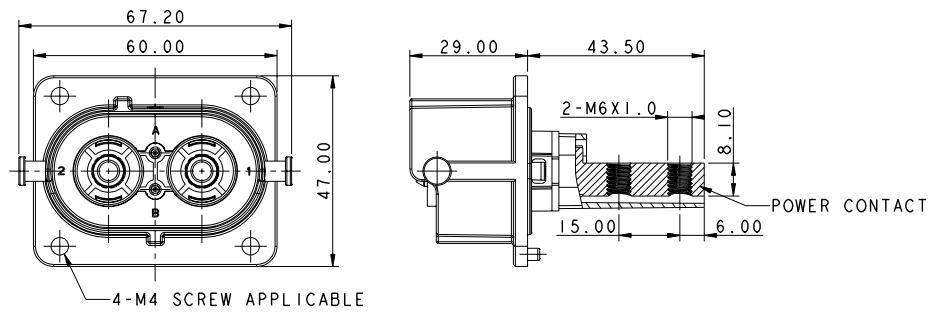
Touch-proof, IP2XB

Multiple coding positions

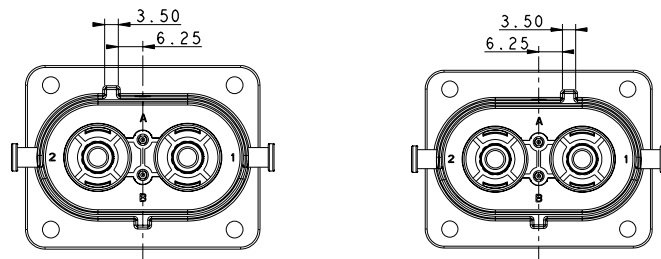
CPA available

MECHANICAL	
Durability	≥ 50 mating cycles
Wire range	25 to 50 mm ² shielded wire
Insertion and extraction force	< 100N
Connection type	Copper bar
HVIL	Integrated
CPA	Available
ELECTRICAL	
Rated voltage	1000V DC
Rated current	180A Max @ ambient temperature 70°C
Insulator resistance	> 100MΩ
Dielectric withstand voltage	3000V AC
Shielding	360° from wire to device
ENVIRONMENTAL	
Sealing	IP67, IP6K9K (mated)
Touch-proof	IP2XB
Temperature range	-40°C to 125°C
Salt spray	96 hours
STANDARDS	
USCAR-2	
USCAR-37	
LV-215	
RoHS	
MATERIAL	
Terminals	Copper/copper alloy with silver plating
Housing	Aluminium alloy

RECEPTACLE

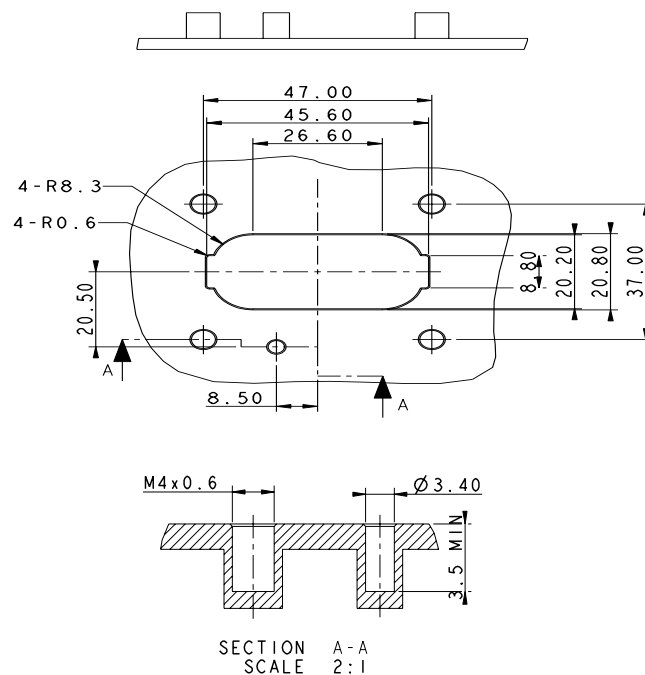


INSERT ORIENTATIONS

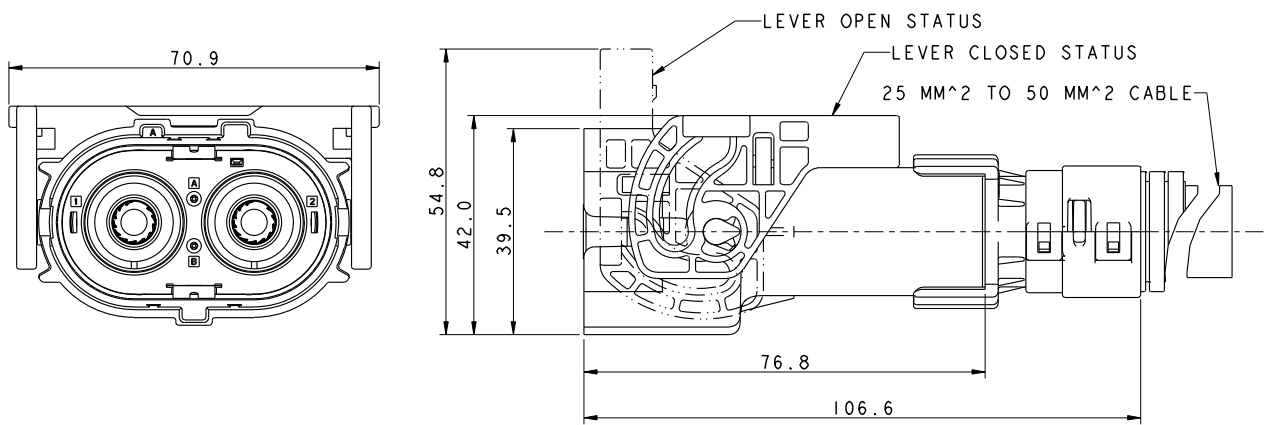


	Coding A	Coding B
P/N	HVSL800 02 2 A	HVSL800 02 2 B

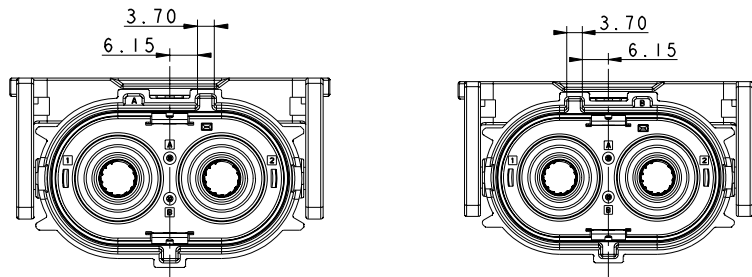
PANEL MOUNTED DIMENSIONS



STRAIGHT PLUG



INSERT ORIENTATIONS

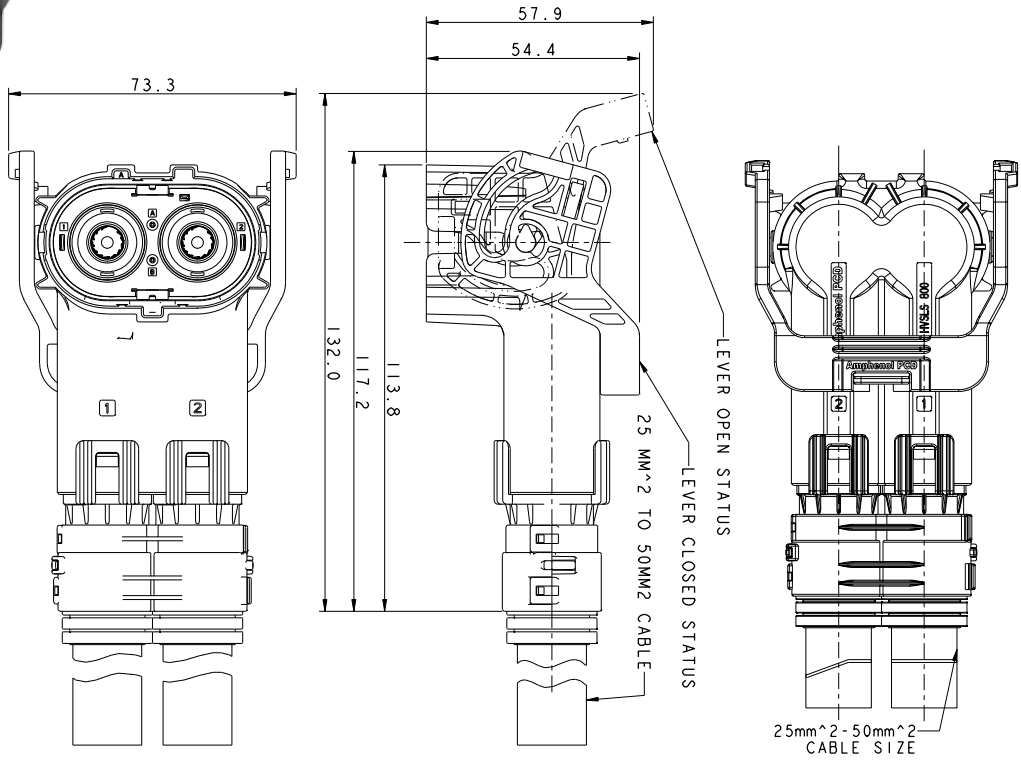


P/N

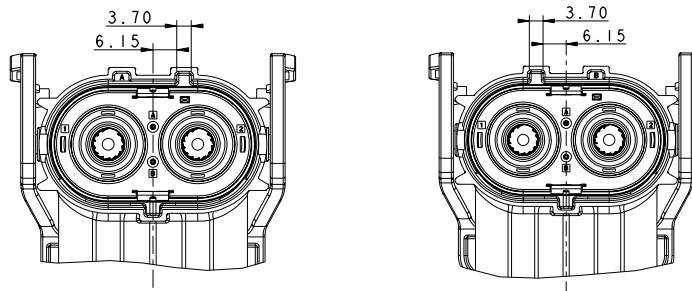
Coding A
HVSL S800 06 2 A

Coding B
HVSL S800 06 2 B

PLUG RIGHT ANGLE

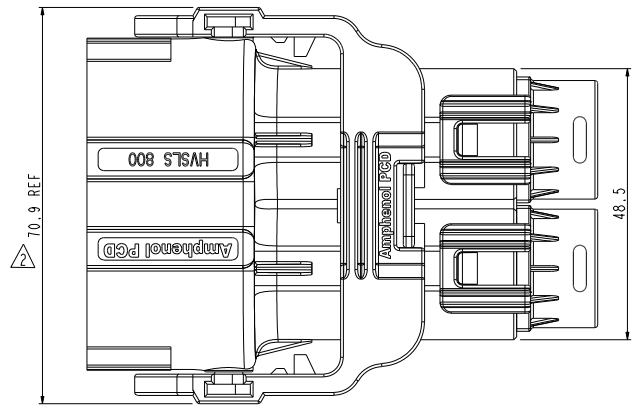
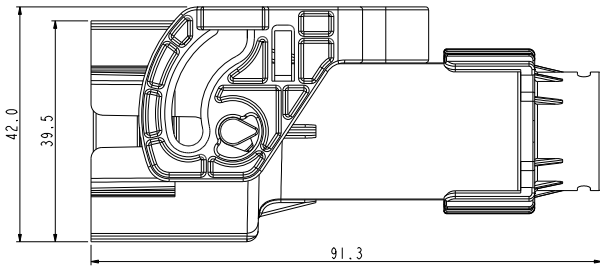


INSERT ORIENTATIONS



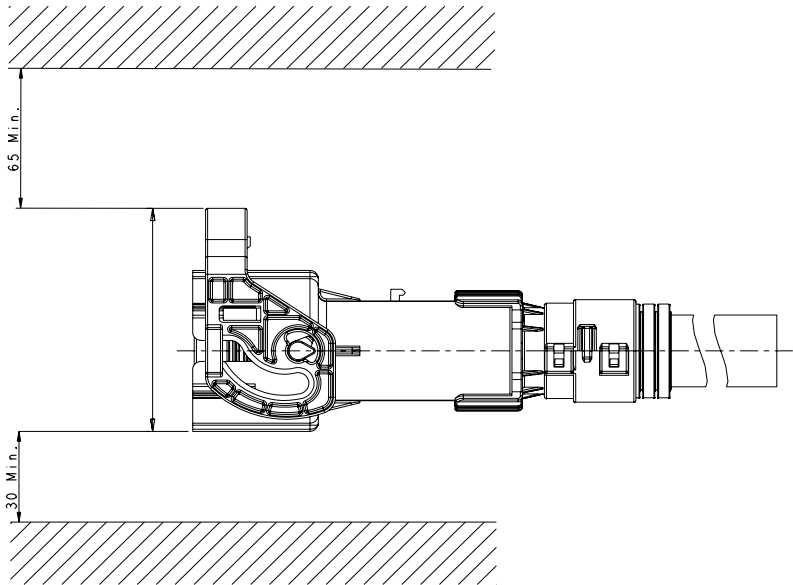
	Coding A	Coding B
P/N	HVSL S800 08 2 A	HVSL S800 08 2 B

DUMMY PLUG - 2PIN



	HVSL S 800	06	2	A	S1
Product type:	06: Straight plug				
Position:	2: 2 position				
Coding / Alternate position:	A: Coding A B: Coding B				
Dummy plug:	S1				

INSTALLATION CLEARANCE



HOW TO ORDER: PLUG

	HVSL S800	06	2	A	0	35
Product type:	06: Straight plug 08: Right angle plug					
Position:	2: 2 position					
Coding / Alternate position:	A: Coding A B: Coding B					
Interlock:	0: Without interlock 1: With interlock					
Cable size:	25: 25mm ² cable 35: 35mm ² cable 50: 50mm ² cable					

HOW TO ORDER: RECEPTACLE

	HVSL S800	02	2	A	0	H6
Product type:	02: Box mounted receptacle					
Position:	2: 2 position					
Coding / Alternate position:	A: Coding A B: Coding B					
Interlock:	0: Without interlock 1: With interlock					
Cable size:	H6: OT terminal					

EXCEL | MATE Metal (HVSL 8003)

EXCEL | MATE Metal (HVSL 8003)



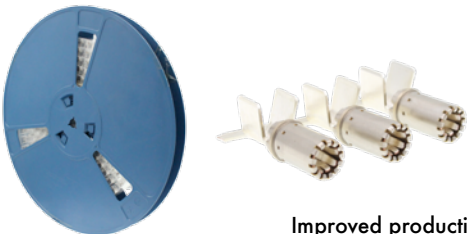
EXCEL | MATE Metal

EXCEL | MATE Metal is a 2 pin connector with a current carrying capacity of 200A and 25 to 50mm² crimping cable.

Specially designed for battery, inverters, junction boxes, power distribution boxes and others HEV devices' equipment.

KEY FEATURES

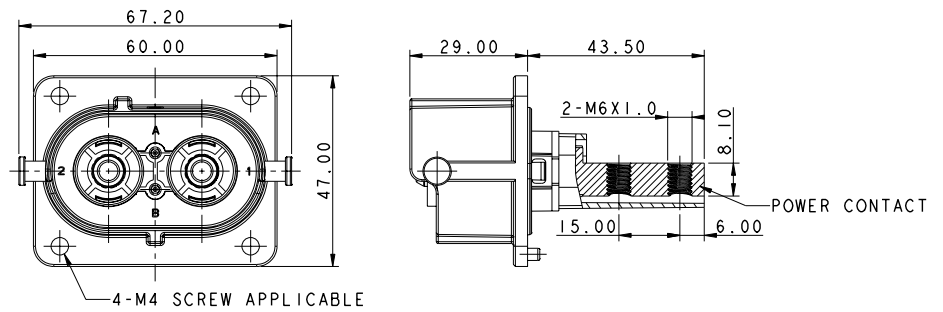
- Integrated internal HVIL
- Current rating up to 200A@ ambient temperature 70°C
- No tool required to unmate
- Sealing, IP67 (mated), IP6K9K
- Touch-proof, IP2XB
- Multiple coding positions
- CPA available



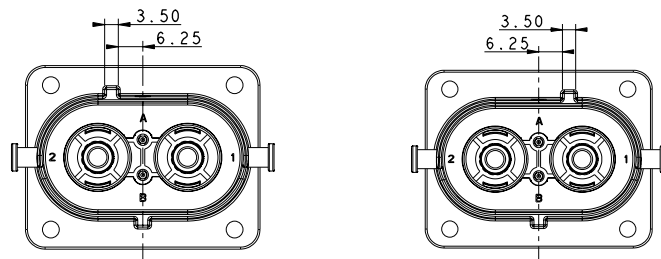
Improved production efficiency. Automated tape and reel packaging.

MECHANICAL	
Durability	≥ 50 mating cycles
Wire range	25 to 50 mm ² shielded wire
Insertion and extraction force	< 100N
Connection type	Copper bar
HVIL	Integrated
CPA	Available
ELECTRICAL	
Rated voltage	1000V DC
Rated current	200A Max @ ambient temperature 70°C
Insulator resistance	> 100MΩ
Dielectric withstand voltage	3000V AC
Shielding	360° from wire to device
ENVIRONMENTAL	
Sealing	IP67, IP6K9K (mated)
Touch-proof	IP2XB
Temperature range	-40°C to 125°C
Salt spray	96 hours
STANDARDS	
USCAR-2	
USCAR-37	
LV-215	
RoHS	
MATERIAL	
Terminals	Copper/copper alloy with silver plating
Housing	Aluminium alloy

RECEPTACLE

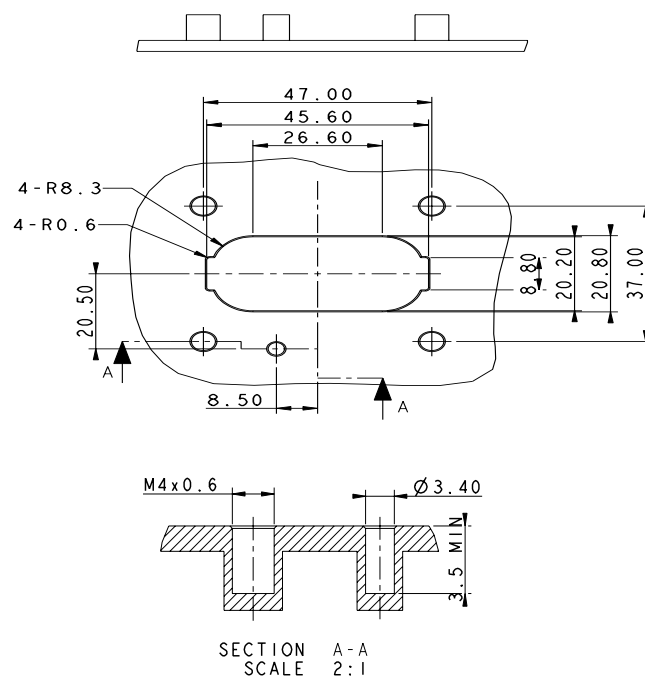


INSERT ORIENTATIONS



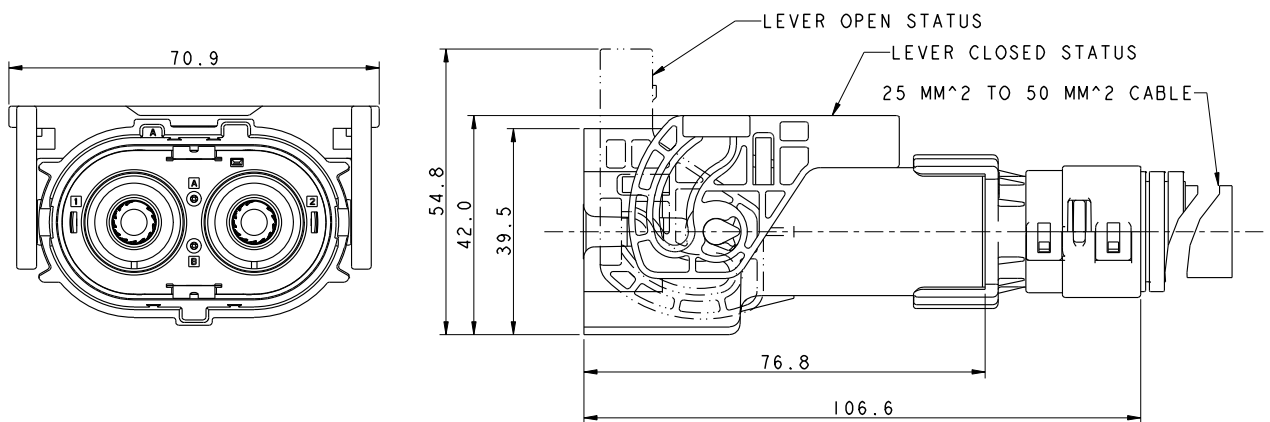
	Coding A	Coding B
P/N	HVSL8003 2 2 A	HVSL8003 2 2 B

PANEL MOUNTED DIMENSIONS

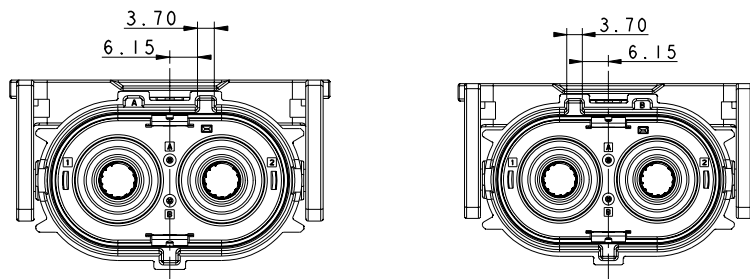


Excel|Mate Metal (HVSL 8003)

STRAIGHT PLUG



INSERT ORIENTATIONS

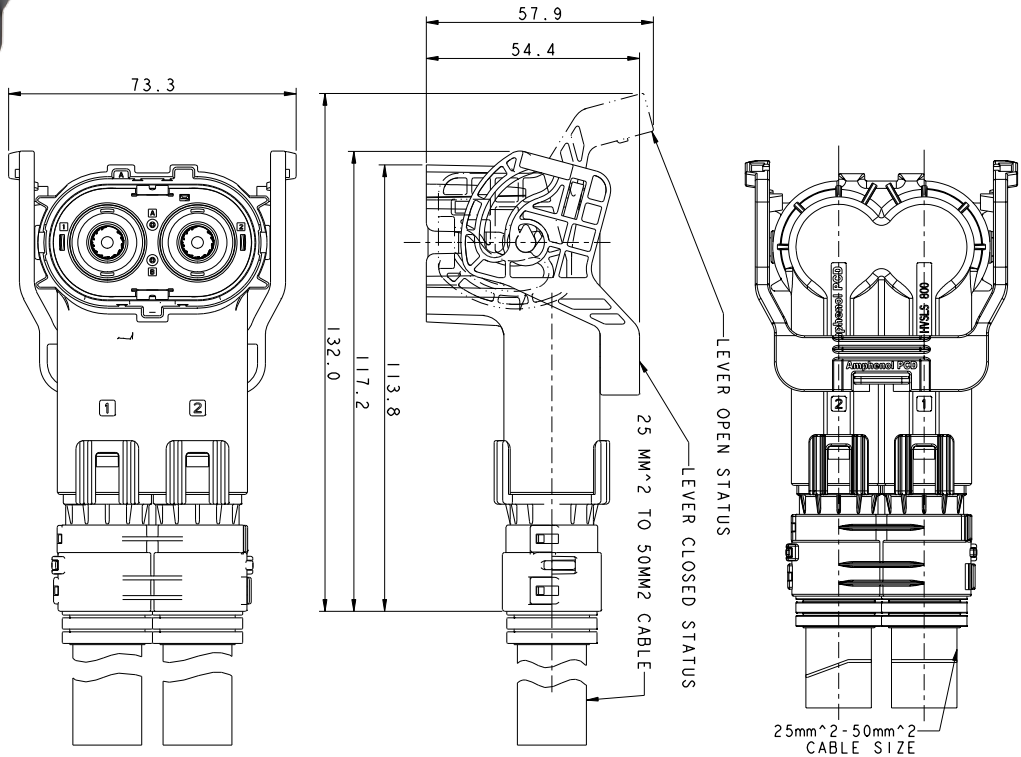


P/N

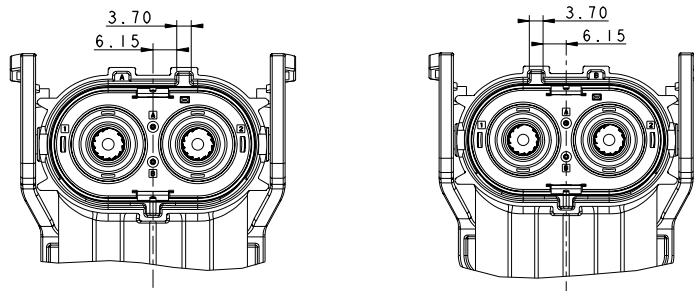
Coding A
HVSL8003 6 2 A

Coding B
HVSL8003 6 2 B

RIGHT ANGLE PLUG

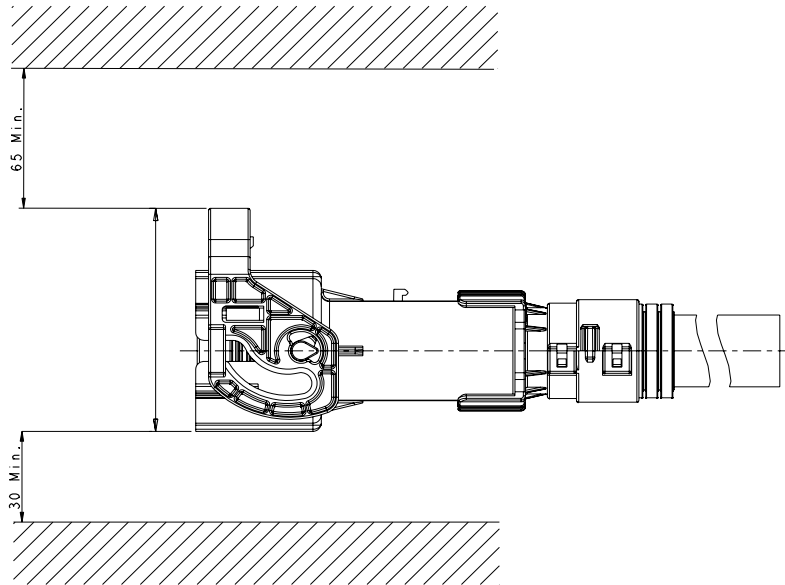


INSERT ORIENTATIONS



	Coding A	Coding B
P/N	HVSL8003 8 2 A	HVSL8003 8 2 B

INSTALLATION CLEARANCE



HOW TO ORDER: PLUG

	HVSL8003	6	2	A	0	35
Product type:	6: Straight plug 8: Right angle plug					
Position:	2: 2 position					
Coding / Alternate position:	A: Coding A B: Coding B					
Interlock:	0: Without interlock 1: With interlock					
Cable size:	25: 25mm ² cable 35: 35mm ² cable 50: 50mm ² cable					

HOW TO ORDER: RECEPTACLE

	HVSL8003	2	2	A	0	H6
Product type:	2: Box mounted receptacle					
Position:	2: 2 position					
Coding / Alternate position:	A: Coding A B: Coding B					
Interlock:	0: Without interlock 1: With interlock					
Cable size:	H6: OT terminal					

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www.amphenolpcd.com.cn

Notes:

Amphenol PCD Shenzhen has made every effort to ensure that the information contained in this catalog is accurate at the time of publication. Specifications or information stated in this publication are subject to change without notice.

Amphenol PCD Shenzhen reserves the right to clarify this catalog.