

EXCEL | MATE Plus



High Voltage Safety Lock

EXCEL | MATE Plus offers a max rated voltage up to 1000V and a max rated current of 250A. It can be used for power solutions in various HEV applications.

External HVIL for 1 position and internal HVIL for 2 to 3 positions.

KEY FEATURES

With interlock solution

RADSOK® Technology R4 version
10mm

AK compliance LV215

Sealing, IP67 (mated), IP6K9K

1 to 3 positions available

Touch-proof, IP2XB

Multiple coding positions

APPLICATIONS

HEV Battery

Inverters

Junction boxes

Power distribution boxes

MECHANICAL

Durability ≥ 50 mating cycles

Wire range 25 to 70 mm²

ELECTRICAL

Rated voltage 1000V DC

Rated current 250A Max @ ambient
temperature 70°C

Insulator resistance $> 100\text{M}\Omega$

Dielectric withstand
voltage 3000V AC

ENVIRONMENTAL

Sealing IP67, IP6K9K (mated)

Touch-proof IP2XB

Temperature range -40°C to 125°C

STANDARDS

LV-215

RoHS

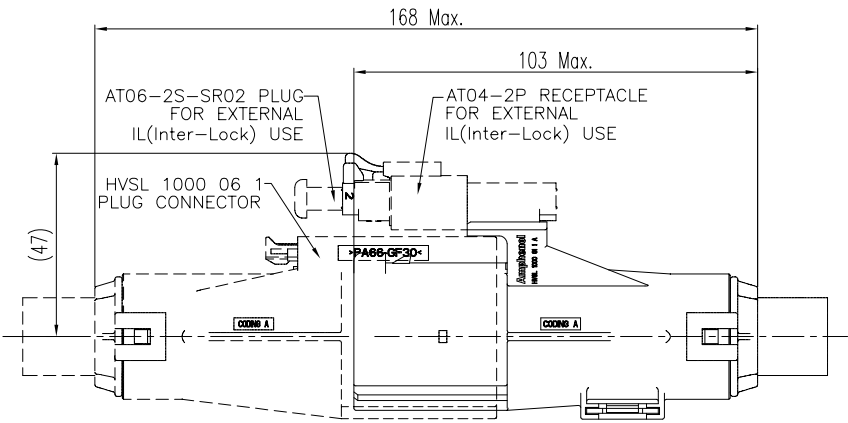
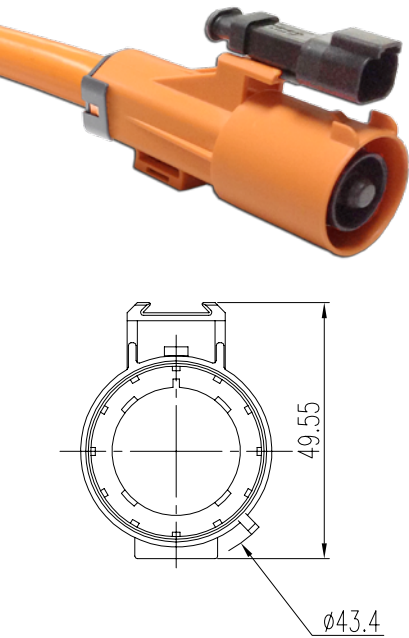
MATERIAL

Contacts Copper alloy with silver
plating

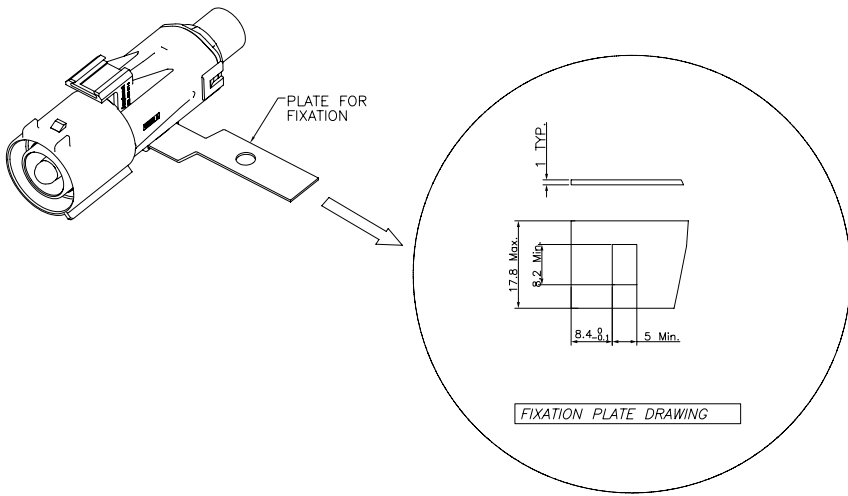
Housing PA66 + GF

Seal SR

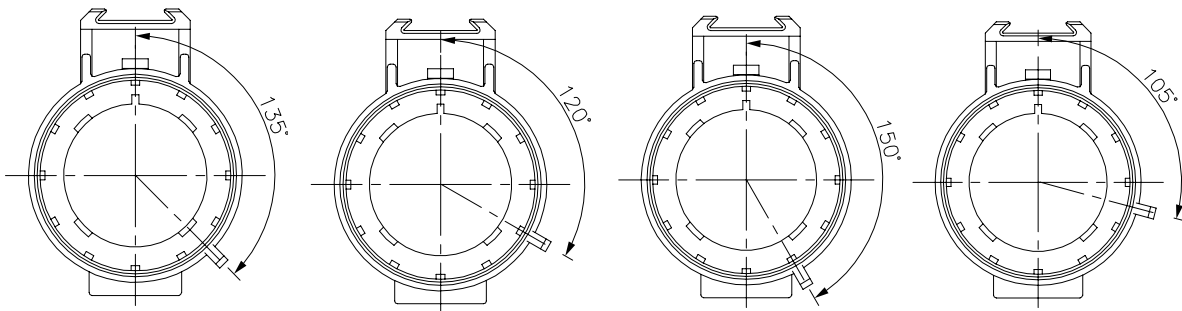
RECEPTACLE IN-LINE



MOUNTED GROOVE

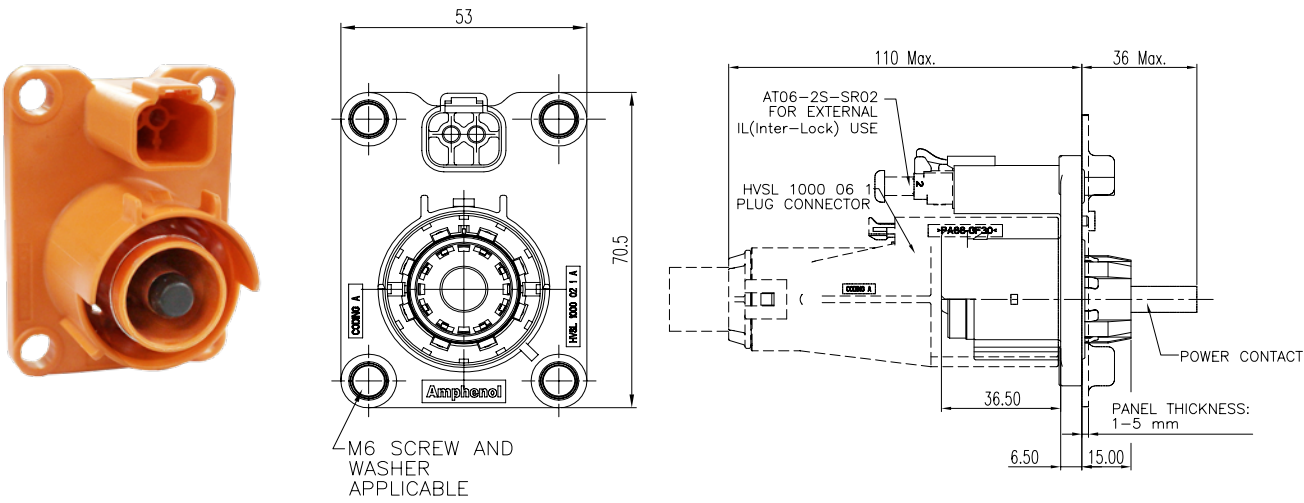


INSERT ORIENTATIONS

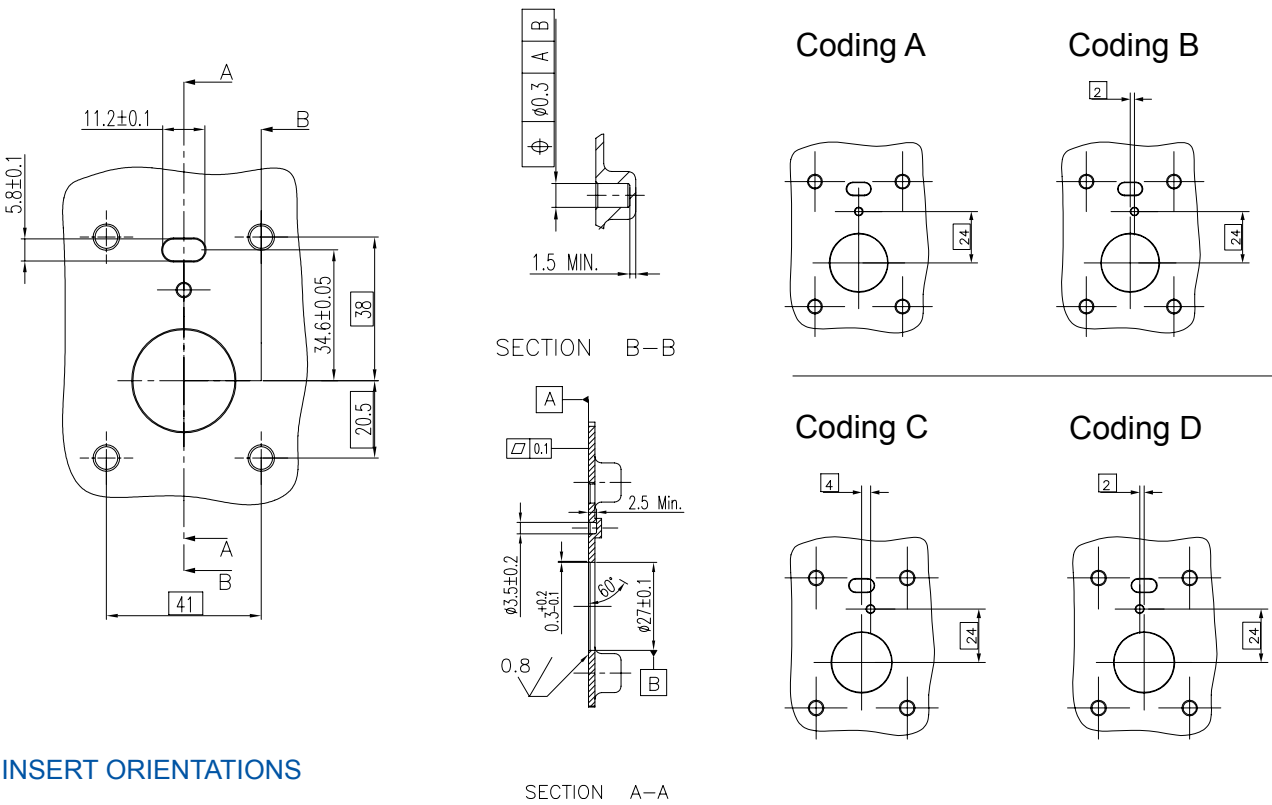


	Coding A	Coding B	Coding C	D 键位
P/N	HVSL1000 01 1 A	HVSL1000 01 1 B	HVSL1000 01 1 C	HVSL1000 01 1 D

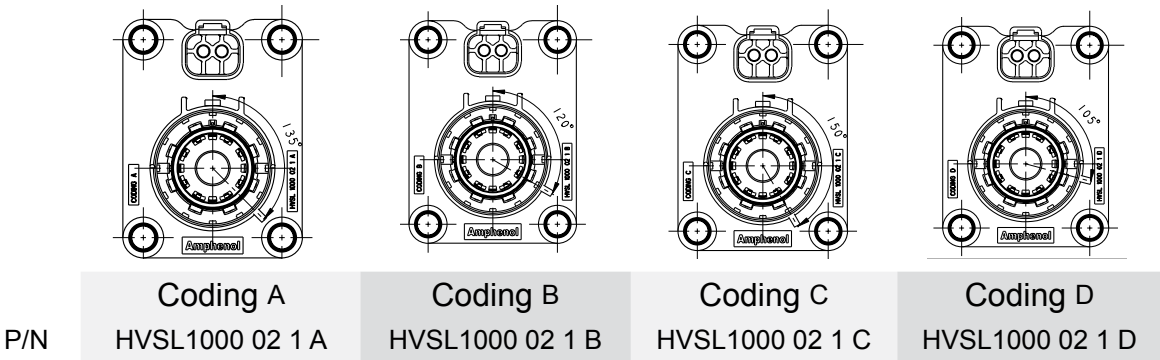
RECEPTACLE BOX MOUNTED



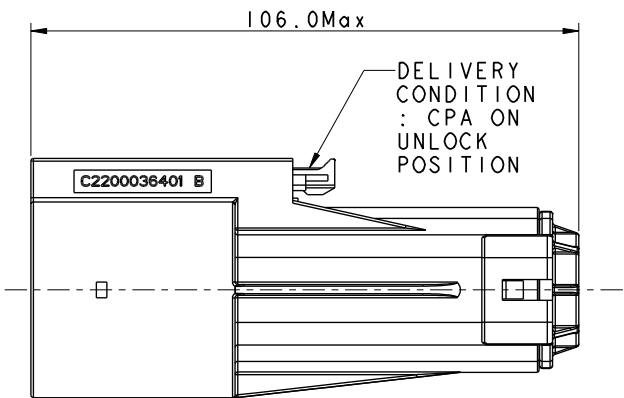
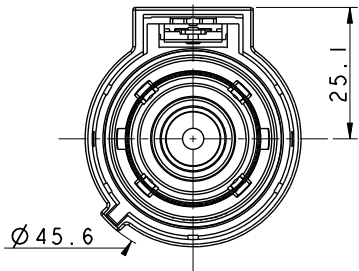
PANEL MOUNTING DIMENSIONS



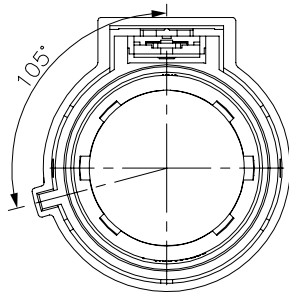
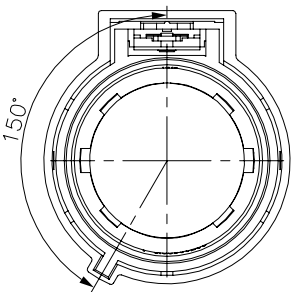
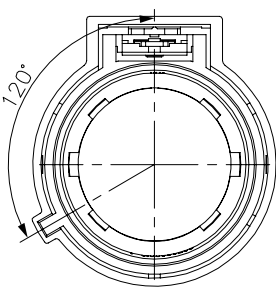
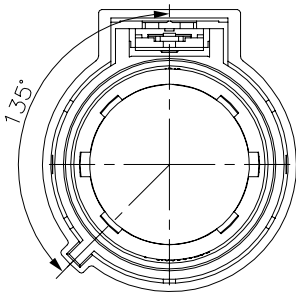
INSERT ORIENTATIONS



PLUG

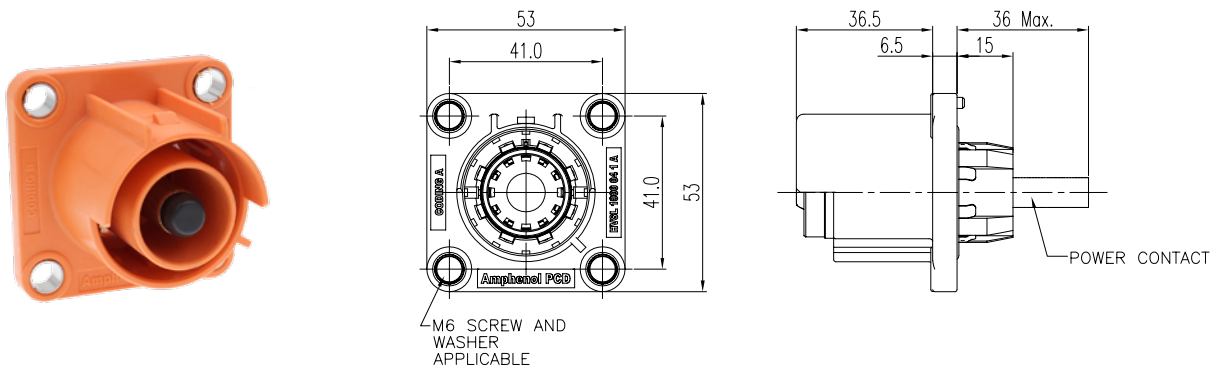


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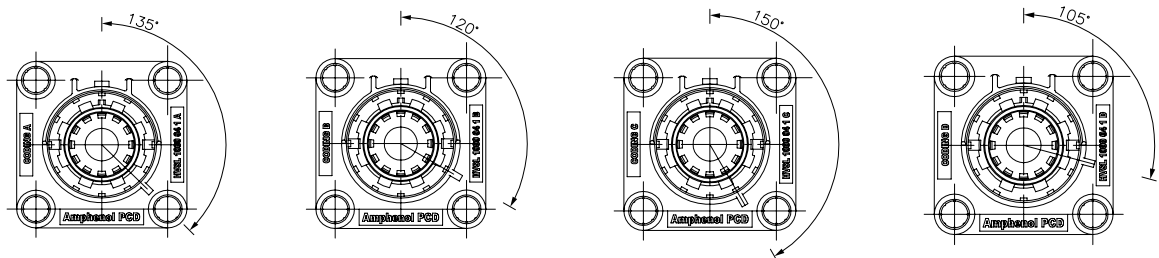


	Coding A	Coding B	Coding C	DCoding D
P/N	HVSL1000 06 1 A	HVSL1000 06 1 B	HVSL1000 06 1 C	HVSL1000 06 1 D

RECEPTACLE BOX MOUNTED **WITHOUT INTERLOCK**

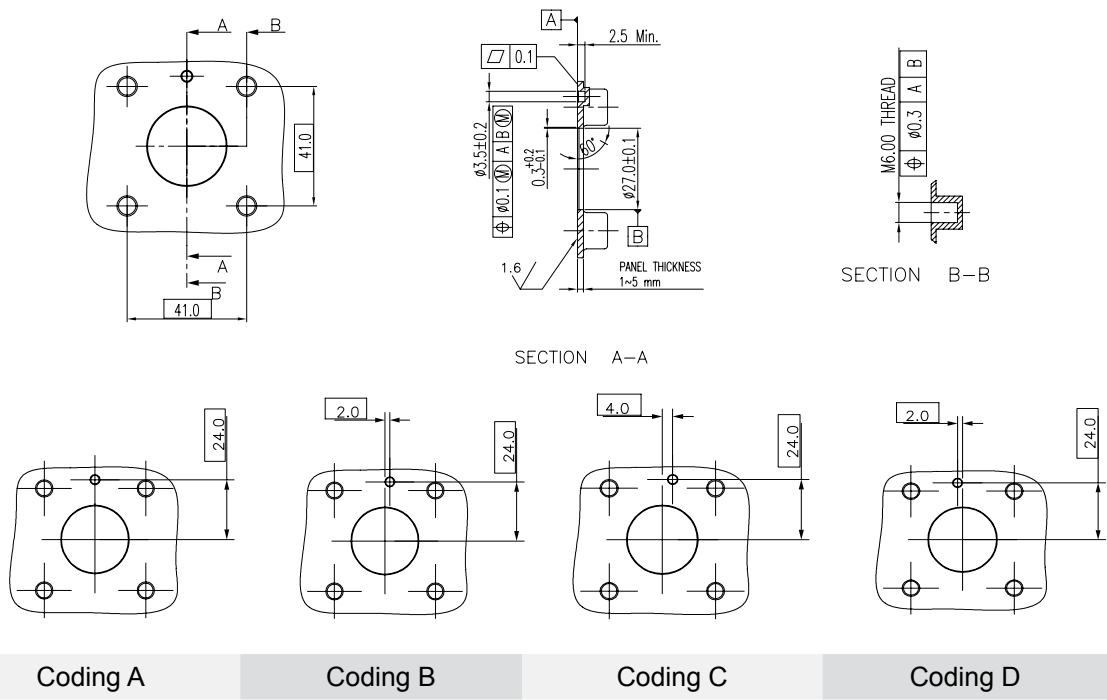


INSERT ORIENTATIONS



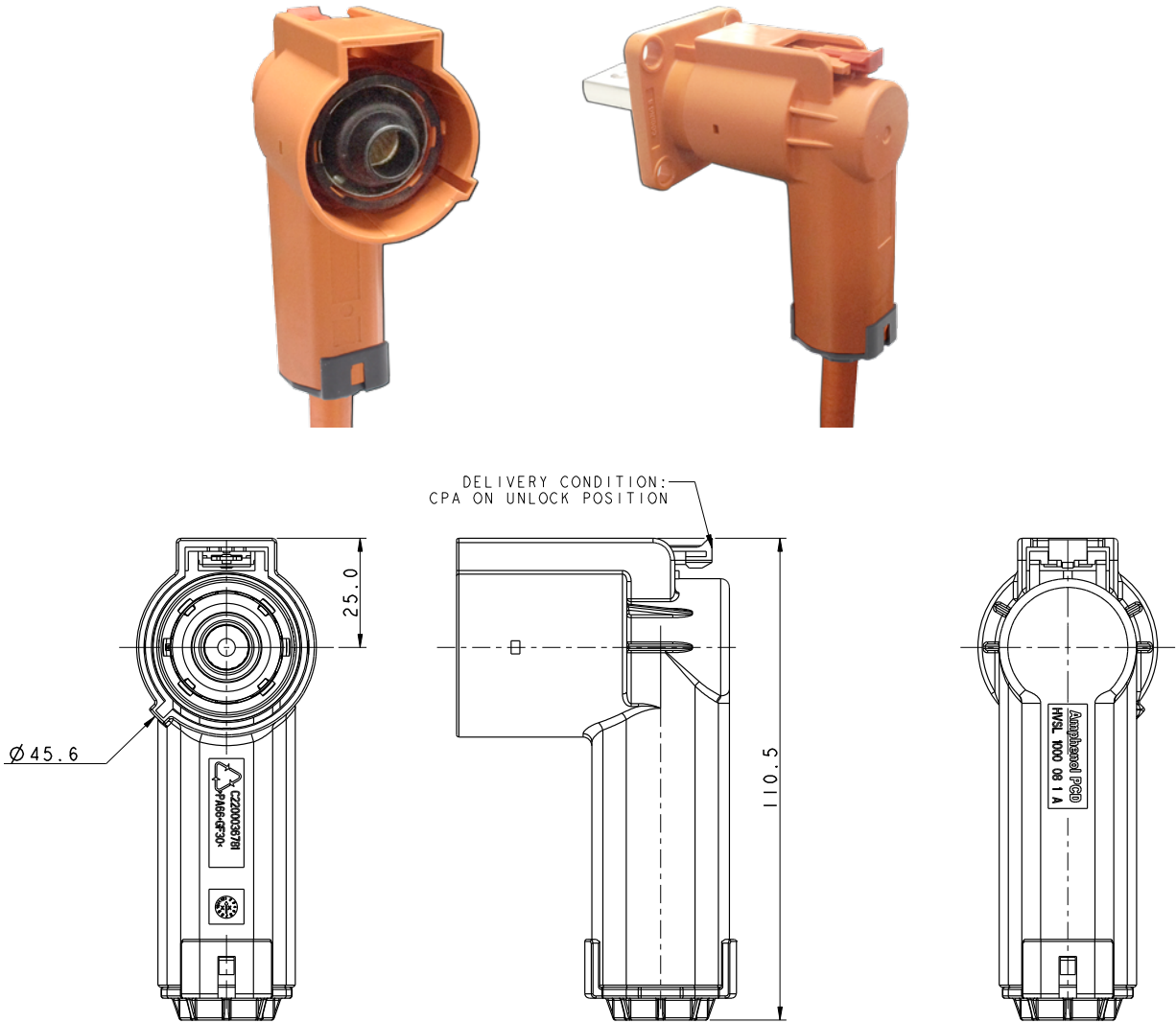
	Coding A	Coding B	Coding C	Coding D
P/N	HVSL1000 04 1 A	HVSL1000 04 1 B	HVSL1000 04 1 C	HVSL1000 04 1 D

PANEL MOUNTING DIMENSIONS

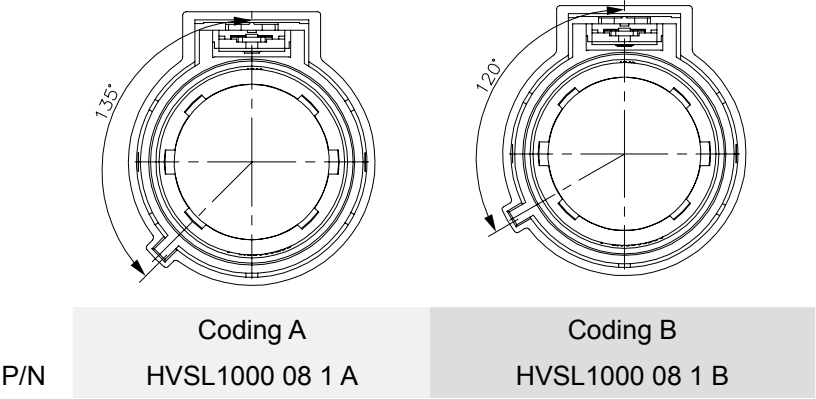


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(HVSL 1000)

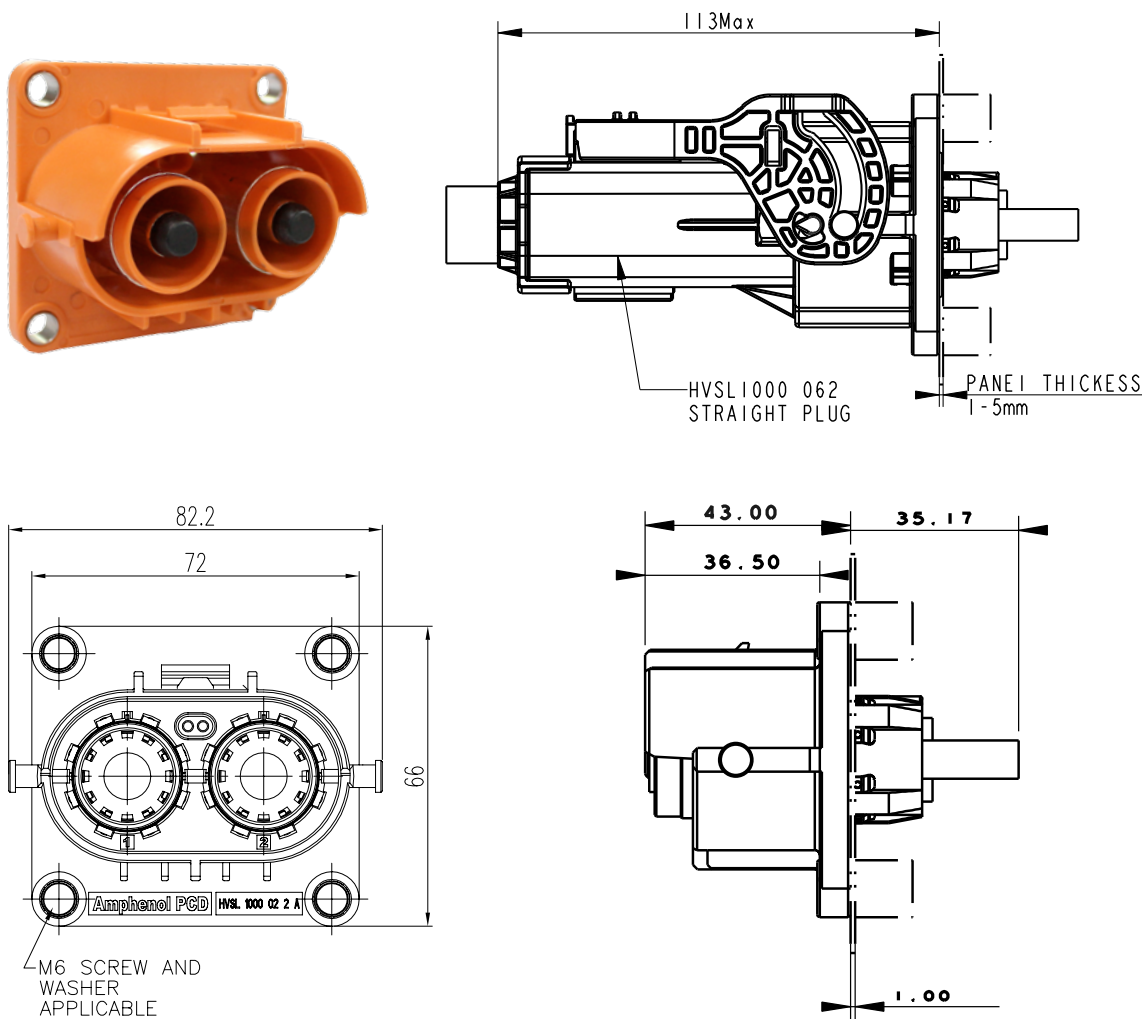
PLUG RIGHT ANGLE



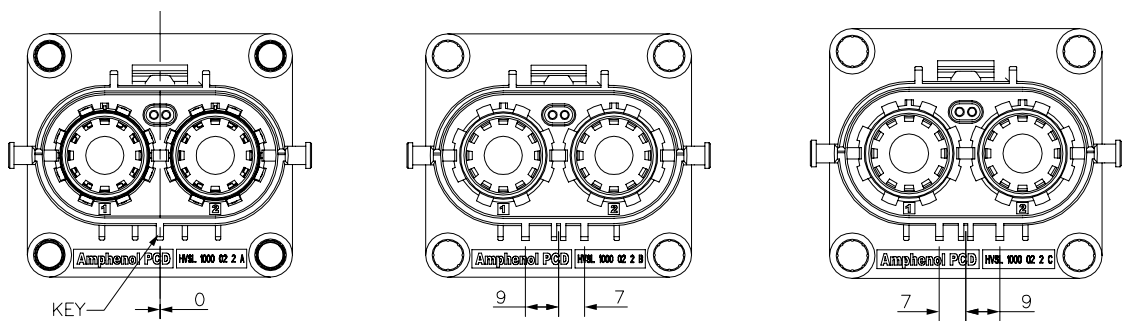
INSERT ORIENTATIONS



2 PIN RECEPTACLE BOX MOUNTED

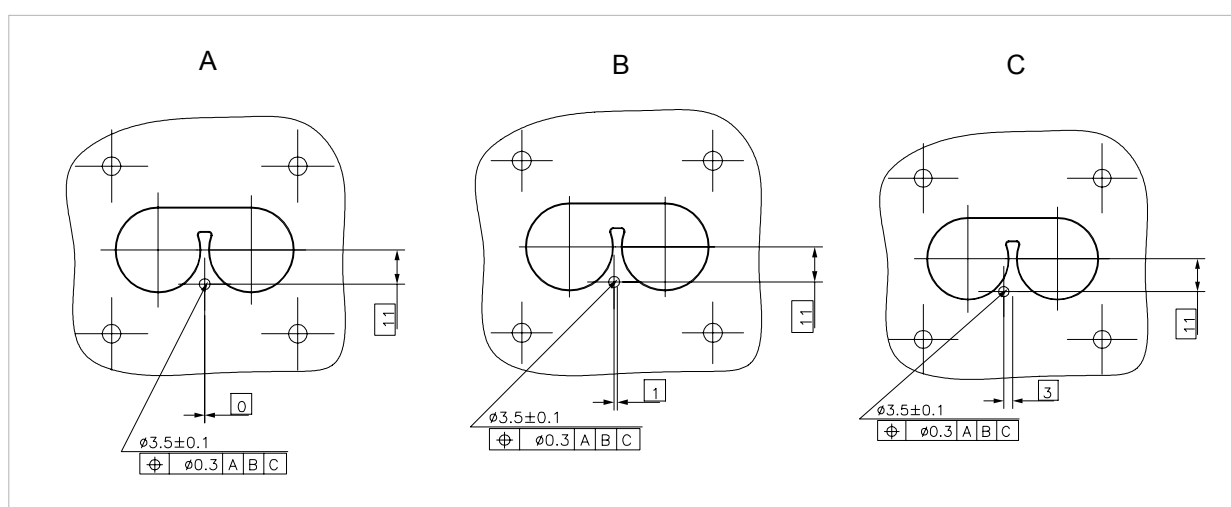
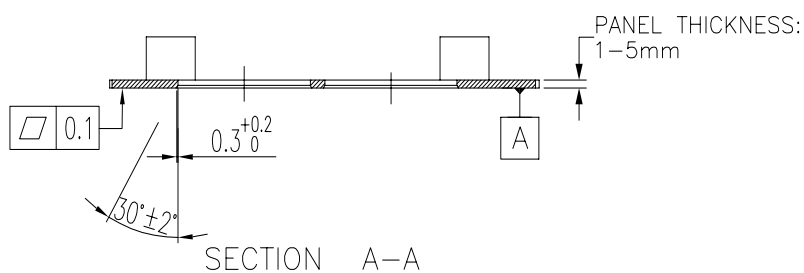
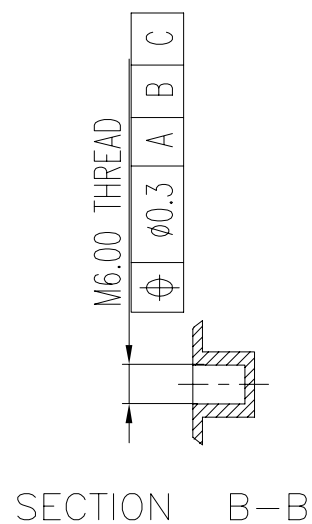
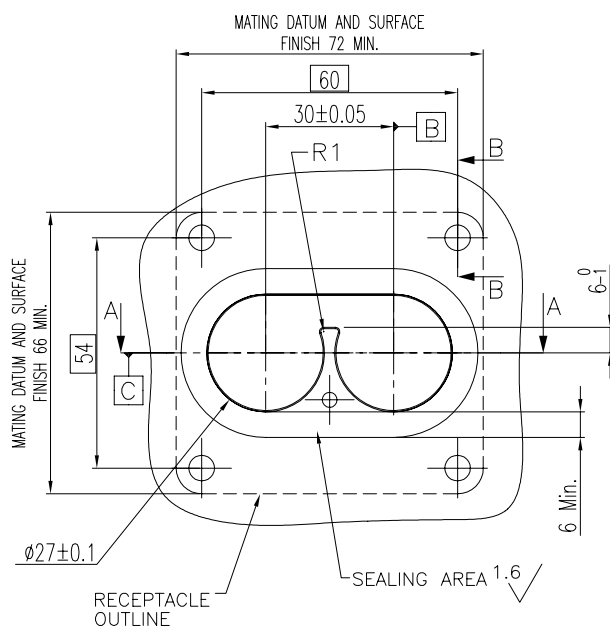


INSERT ORIENTATIONS

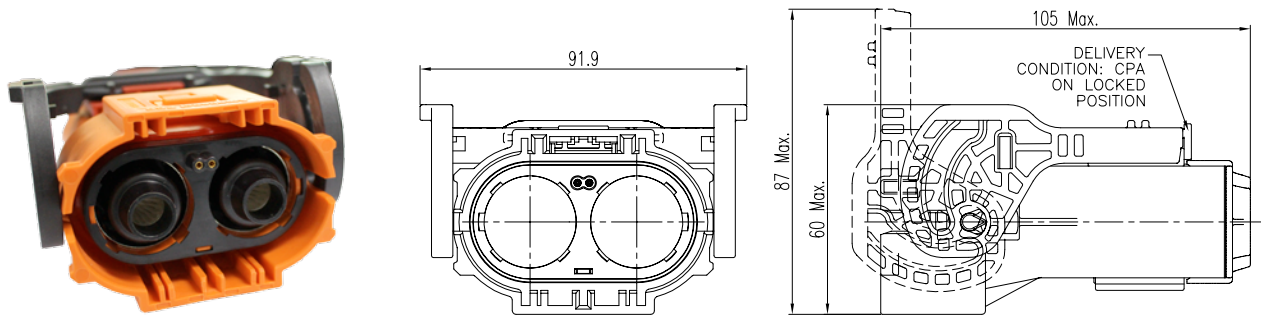


	Coding A	Coding B	Coding C
P/N	HVSL1000 02 2 A	HVSL1000 02 2 B	HVSL1000 02 2 C

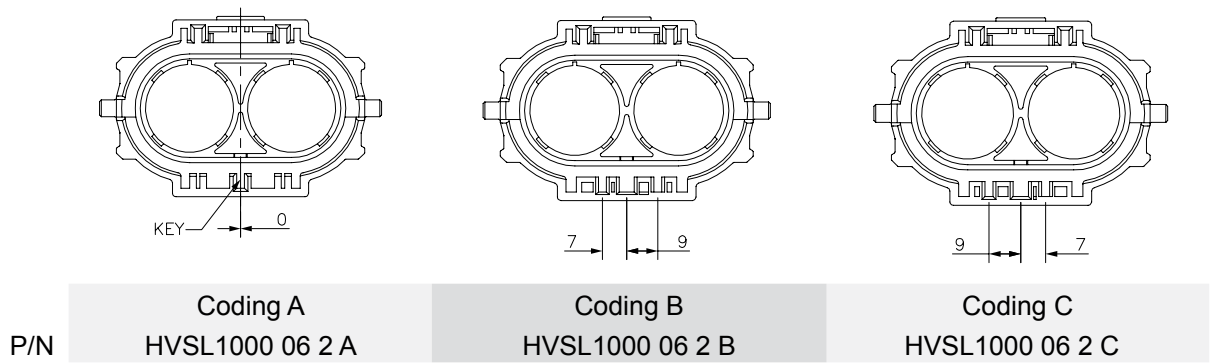
PANEL MOUNTING DIMENSIONS



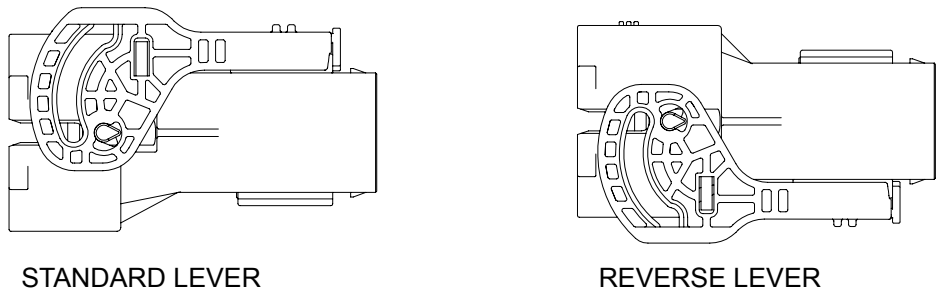
2 PIN PLUG



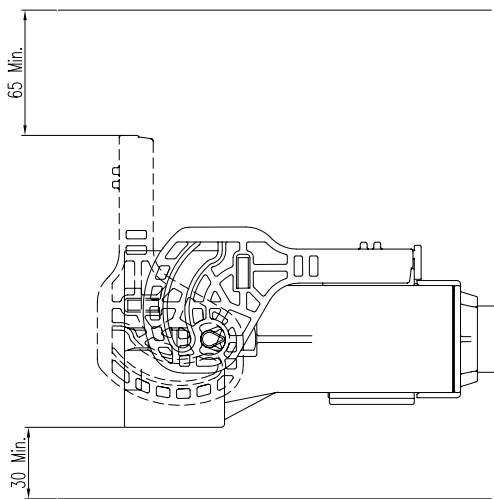
INSERT ORIENTATIONS



LEVER POSITION

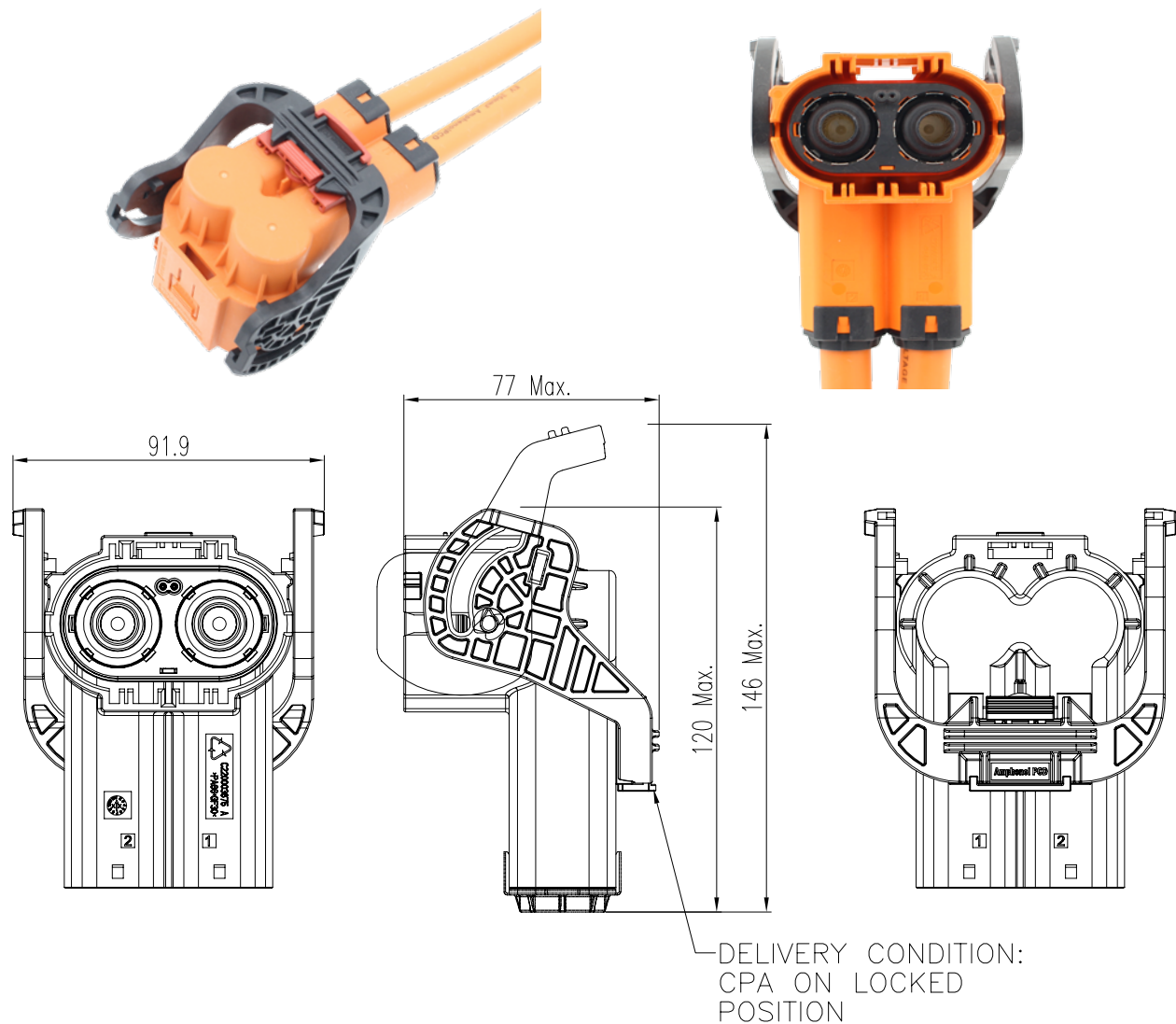


INSTALLATION CLEARANCE

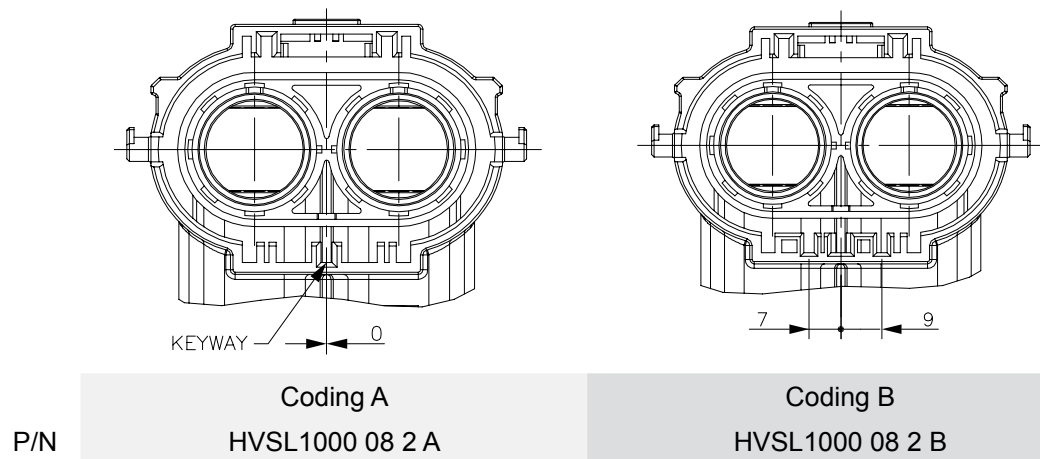


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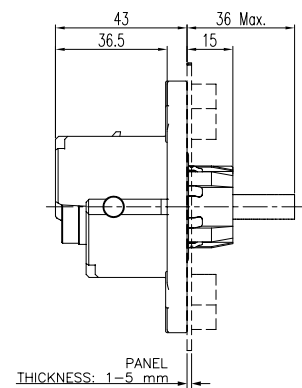
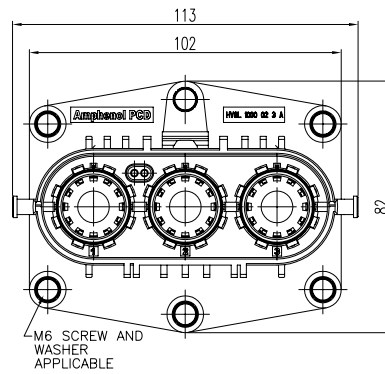
2 PIN PLUG RIGHT ANGLE



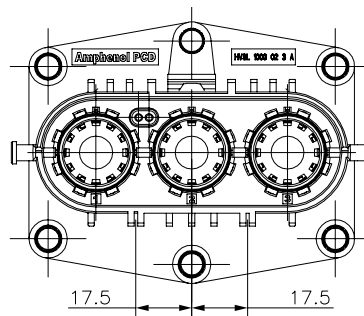
INSERT ORIENTATIONS



3 PIN RECEPTACLE BOX MOUNTED



INSERT ORIENTATIONS

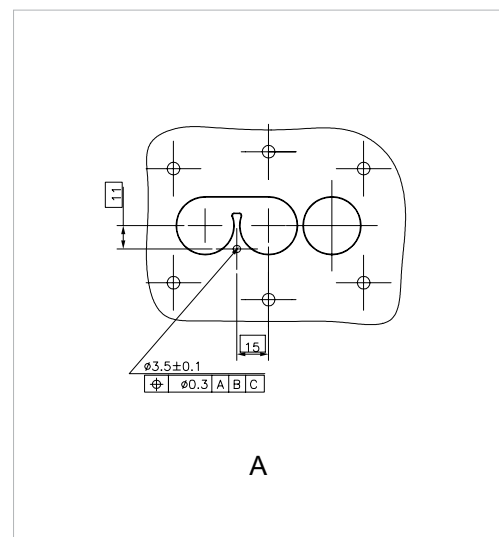
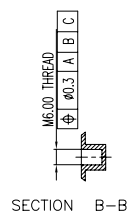
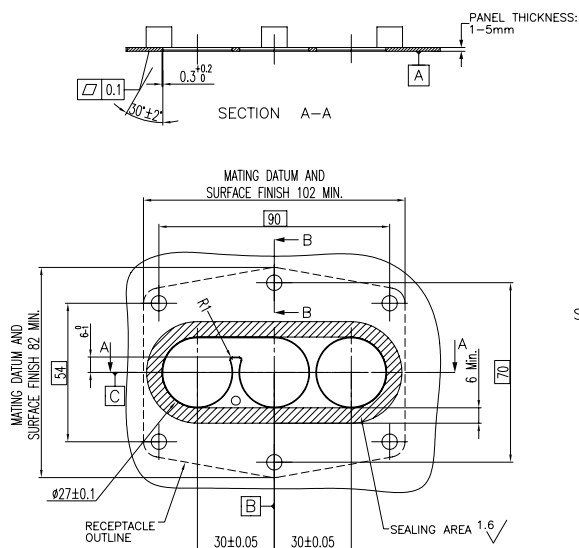


Coding A
HVSL1000 02 3 A

Coding A
HVSL1000 02 3 A

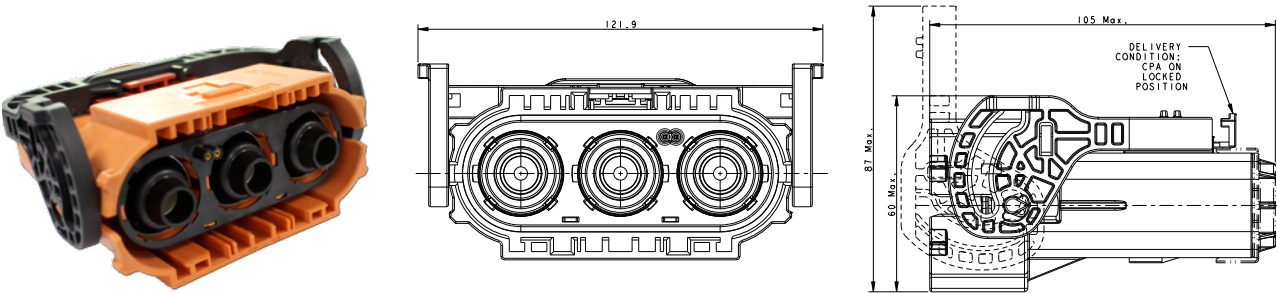
Coding A
HVSL1000 02 3 A

PANEL MOUNTING DIMENSIONS

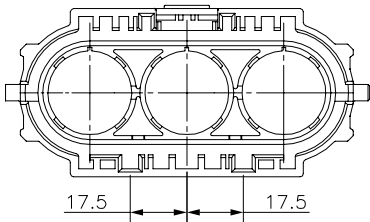


ExcelMate Plus
(HVSL 1000)

3 PIN PLUG

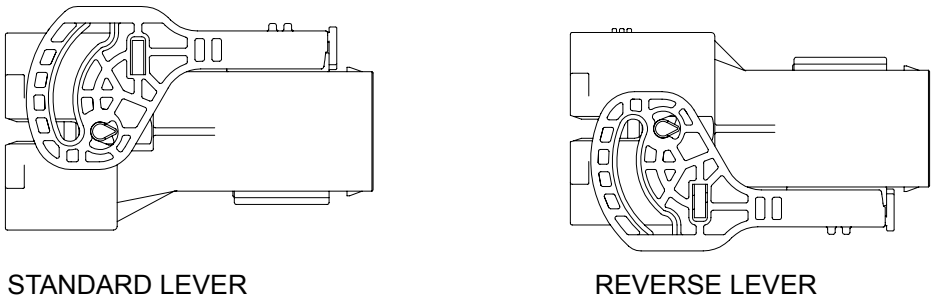


INSERT ORIENTATIONS

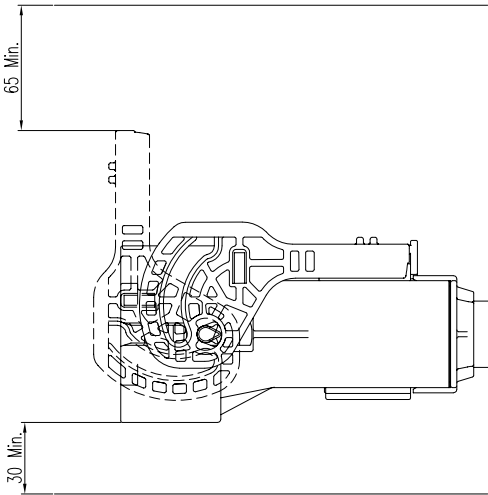


	Coding A
P/N	HVSL1000 06 3 A

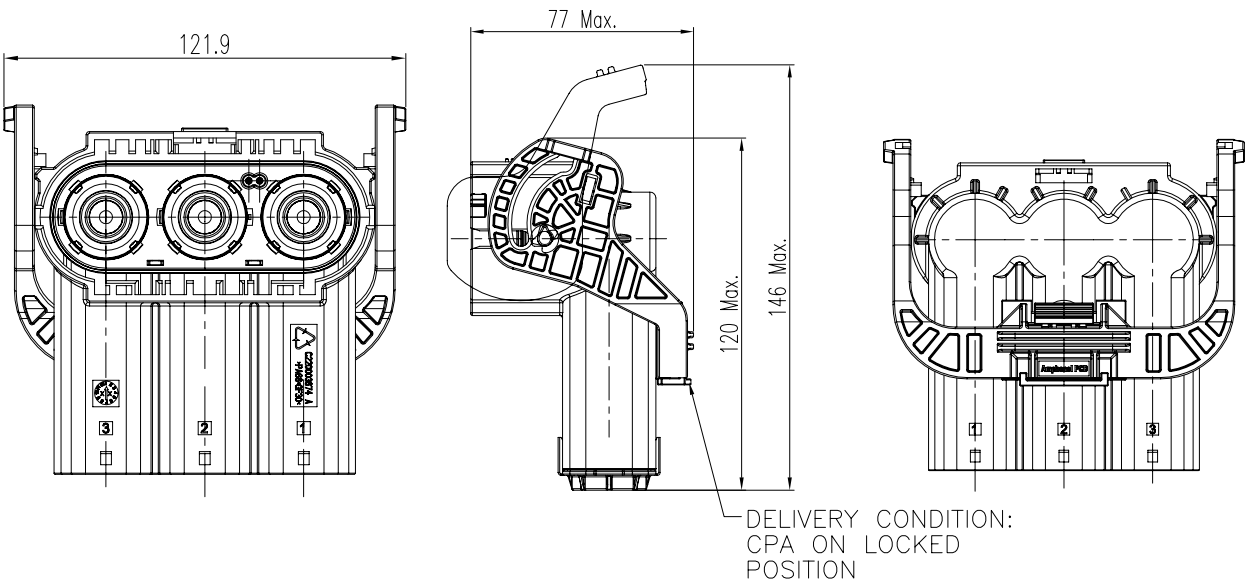
LEVER POSITION



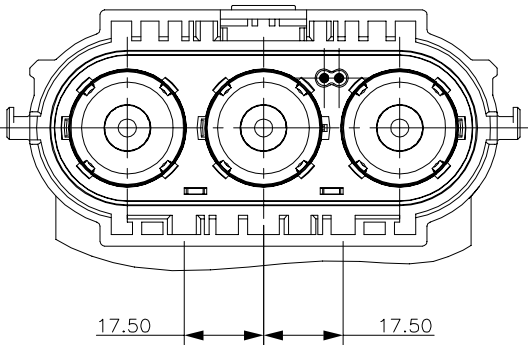
INSTALLATION CLEARANCE



3 PIN PLUG RIGHT ANGLE

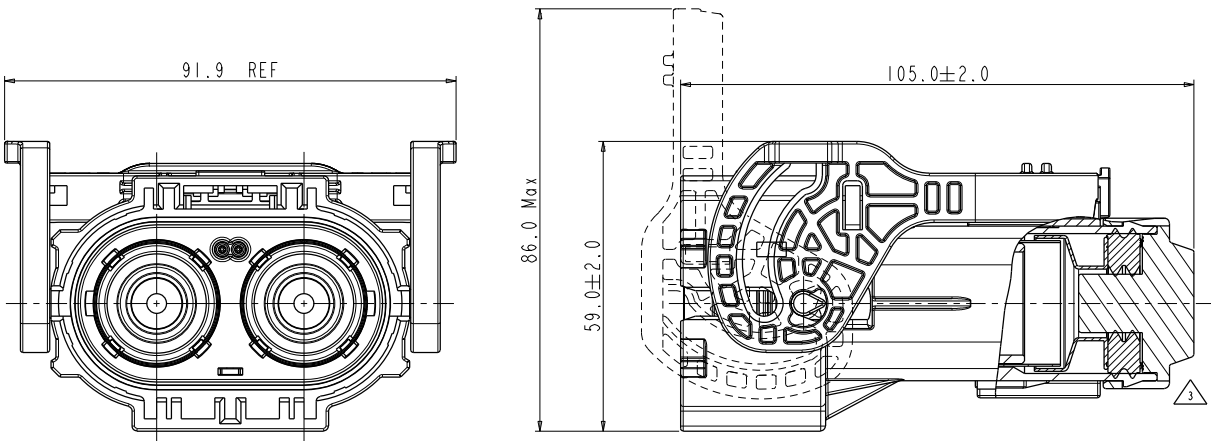


INSERT ORIENTATIONS



	Coding A
P/N	HVSL1000 08 3 A

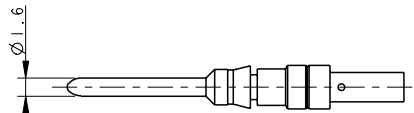
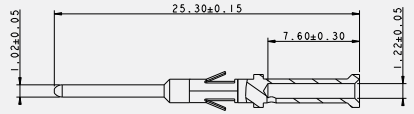
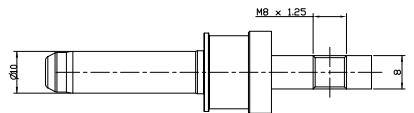
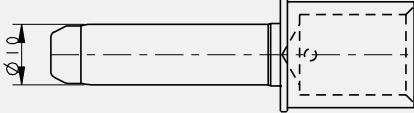
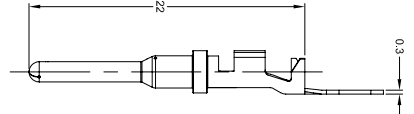
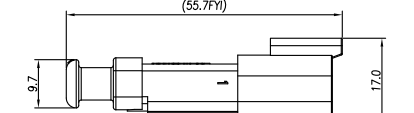
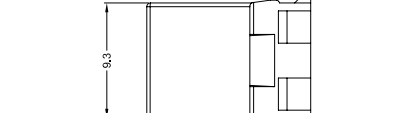
DUMMY PLUG



	HVSL1000	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						

ATTACHMENT: CONTACTS FOR RECEPTACLE

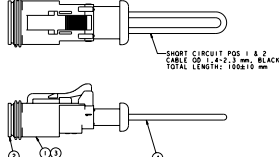
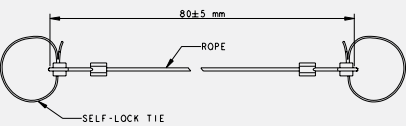
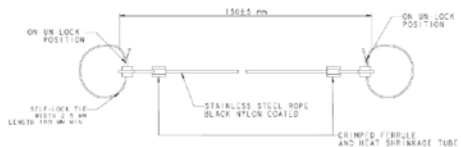
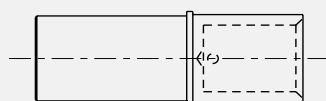
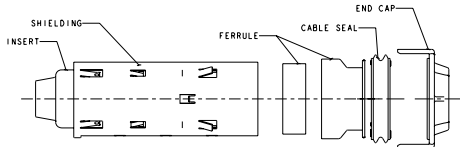
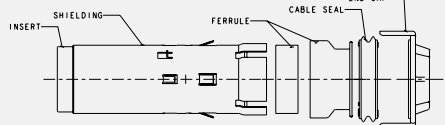
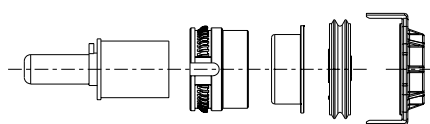
All connectors include contacts. For extra contacts, please order them separately (ref: P/N below)

Name	Contact P/N & Wire Size	Drawing
1 Pin Box mounted receptacle for Interlock	C42000400504G 0.5mm ² max wire	
2 or 3 pin for Interlock	C200003609 0.5mm ² max wire	
Power contact Thread for Bus-bar	C4200036152	
Power contact Crimp for wire	C42000361511 - 70mm ² wire C42000361512 - 50mm ² wire C42000361513 - 35mm ² wire C42000361514 - 25mm ² wire	
1 Pin: In-line receptacle for Interlock	AT60-16-0622 0.5mm ² max wire	
	AT04-2P-SR02BLK 0.5mm ² max wire	
	AW2P	

CONTACTS FOR RECEPTACLE

ATTACHMENT: CONTACTS FOR PLUG

All connectors include contacts. For extra contacts, please order them separately (ref: P/N below)

Name	Contact P/N & Wire Size	Drawing
1 Pin HVIL plug	C210003610	
1 Pin (For In-line plug) Rope for Interlock	C210003608 (Order with HVIL plug)	
1 Pin (For R/A plug) Rope for Interlock	C210003611 (Order with HVIL plug)	
Socket contact	C4200036161 - 70mm ² wire C4200036162 - 50mm ² wire C4200036163 - 35mm ² wire C4200036164 - 25mm ² wire	
Kit of socket insert For plug	C4220036011 - 70mm ² wire C4220036012 - 50mm ² wire C4220036013 - 35mm ² wire C4220036014 - 25mm ² wire	
Kit of socket insert For receptacle in-line	C4220036021 - 70mm ² wire C4220036022 - 50mm ² wire C4220036023 - 35mm ² wire C4220036024 - 25mm ² wire	
Power contact - rear Crimp for wire for right angle plug	C4220036031 - 70mm ² wire C4220036032 - 50mm ² wire C4220036033 - 35mm ² wire C4220036034 - 25mm ² wire	

HVSL 1000 | PRODUCT SERIES OVERVIEW

Single pin
(HVIL External)



In-line receptacle



In-line plug

Single pin
(Without HVIL)



2 pin
(HVIL Integrated)



3 pin
(HVIL Integrated)



EXTRACTION TOOL FOR RECEPTACLE SIGNAL CONTACT

HVIL-contact Extraction tool: HVTOOL11R



HOW TO ORDER (HVSL 1000)

HOW TO ORDER: PLUG

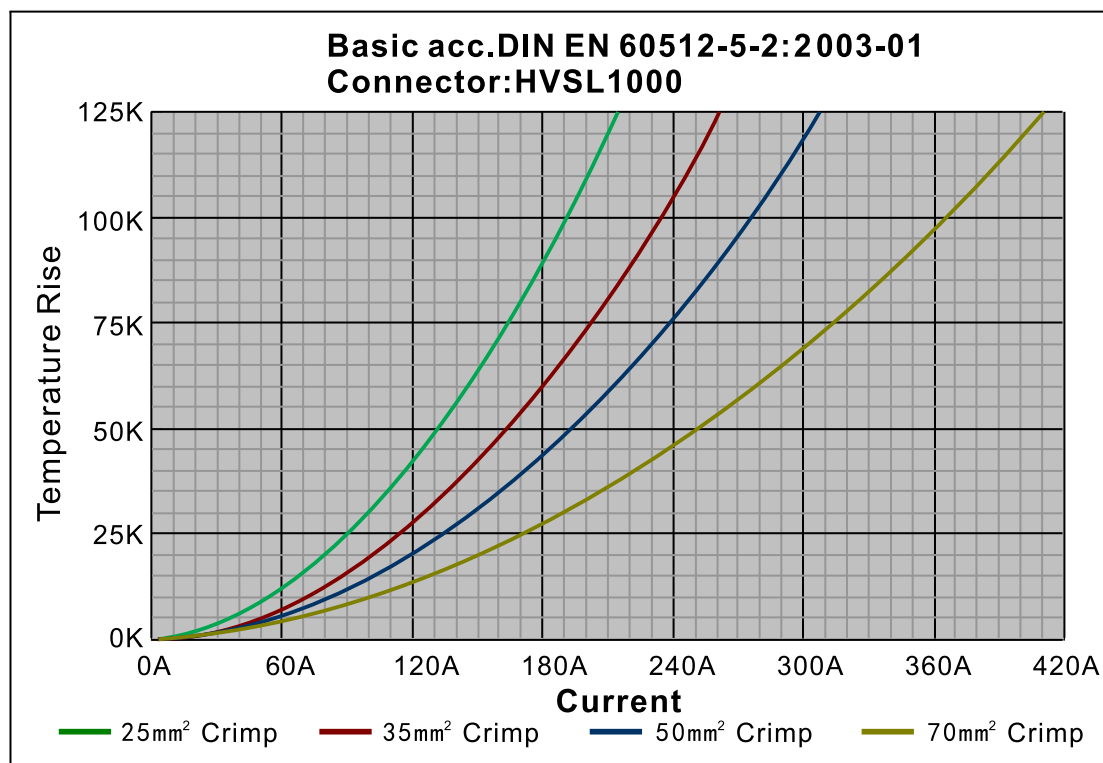
HVSL1000	06	1	A	0	35
Product type:					
06: Straight plug 08: Right angle plug					
Position:					
1: 1 position 2: 2 position 3: 3 position					
Coding / Alternate position:					
A: Coding A (for positions 1, 2 & 3)					
B: Coding B (for positions 1 & 2)					
C: Coding C (for position 1)					
D: Coding D (for position 1)					
Interlock:					
0: Without interlock 1: With interlock					
Cable size:					
25: 25mm ² cable 35: 35mm ² cable 50: 50mm ² cable 70: 70mm ² cable					

HOW TO ORDER: RECEPTACLE

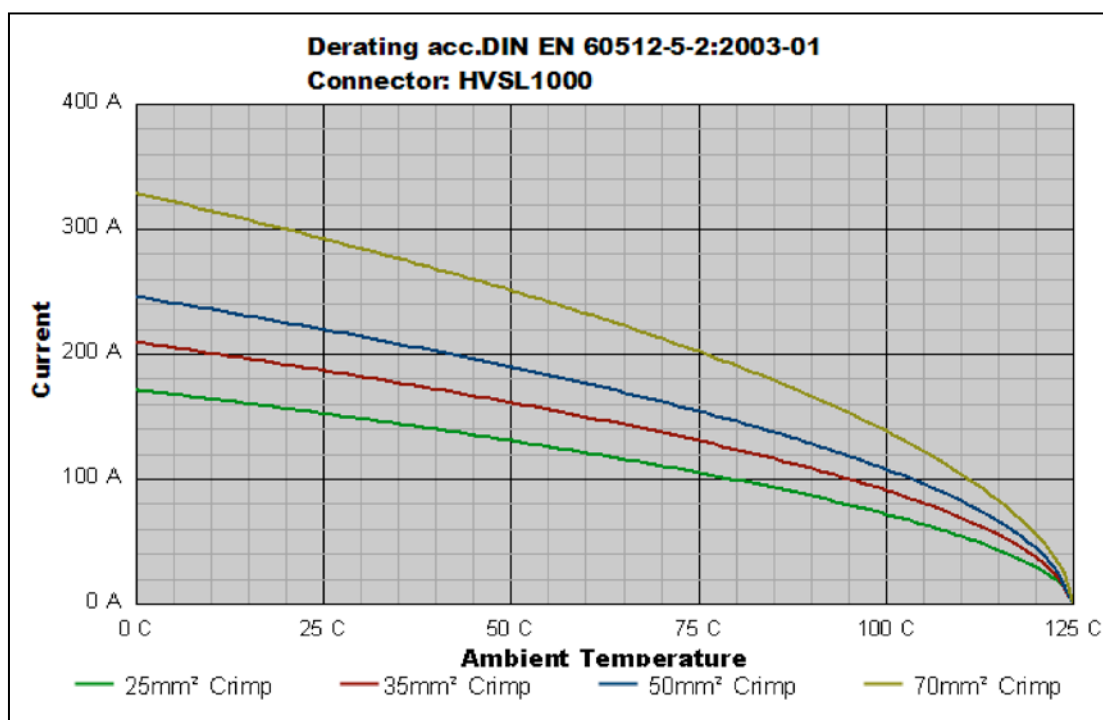
HVSL1000	01	1	A	0	H8
Product type:					
01: In-line receptacle					
Position:					
1: 1 position 2: 2 position 3: 3 position					
Coding / Alternate position:					
A: Coding A (for position 1)					
B: Coding B (for position 1)					
C: Coding C (for position 1)					
D: Coding D (for position 1)					
Interlock:					
0: Without interlock 1: With interlock					
Cable size:					
25: 25mm ² cable 35: 35mm ² cable 50: 50mm ² cable 70: 70mm ² cable					

HVSL1000	02	1	A	0	H8
Product type:					
02: Box mounted receptacle					
04: Box mounted receptacle without Interlock					
Position:					
1: 1 position 2: 2 position 3: 3 position					
Coding / Alternate position:					
A: Coding A (for positions 1, 2 & 3)					
B: Coding B (for positions 1 & 2)					
C: Coding C (for position 1)					
D: Coding D (for position 1)					
Interlock:					
0: Without interlock 1: With interlock					
Cable size:					
H8: M8 OT terminal					

HVSL 1000 | Temperature Rise



HVSL 1000 | Derating Curve



Remark: tests carried out on the complete connector.