

Amphenol High Tension Connectors AMHTC Series



1. Introduction

Amphenol “AMHTC” high tension connector series for railway vehicle installable power distribution systems, offers the ultimate in safety and reliability under the most severe operating conditions.

The AMHTC series connectors allow the user to connect electrical equipment quickly with ultimate safety.

AMHTC is available in two standard formats, which allow complete hook up through the standard daisy chain principle.

2. Features

- Dead front contacts: An insulated tip on the contact element prevents accidental touching of current carry parts. Both the male and female contacts are protected.
- Super High impact Insulators: High impact, flame retardant thermoplastic insulators prevent impact and abrasion damage through continued use in harsh environment applications and also guarantee a high degree of insulation, with maximum resistance to oil, acids and water.
- Water proof when mated: Sealing is guaranteed through IP rated interfacial and cable gland compression seals. Connectors when mated are rated at up to IP67.

Item	Material	Finish	Remarks
Shell	Plastic	-	Fire resistant -30~125°C
Contact	Copper alloy	Sliver Plating	-

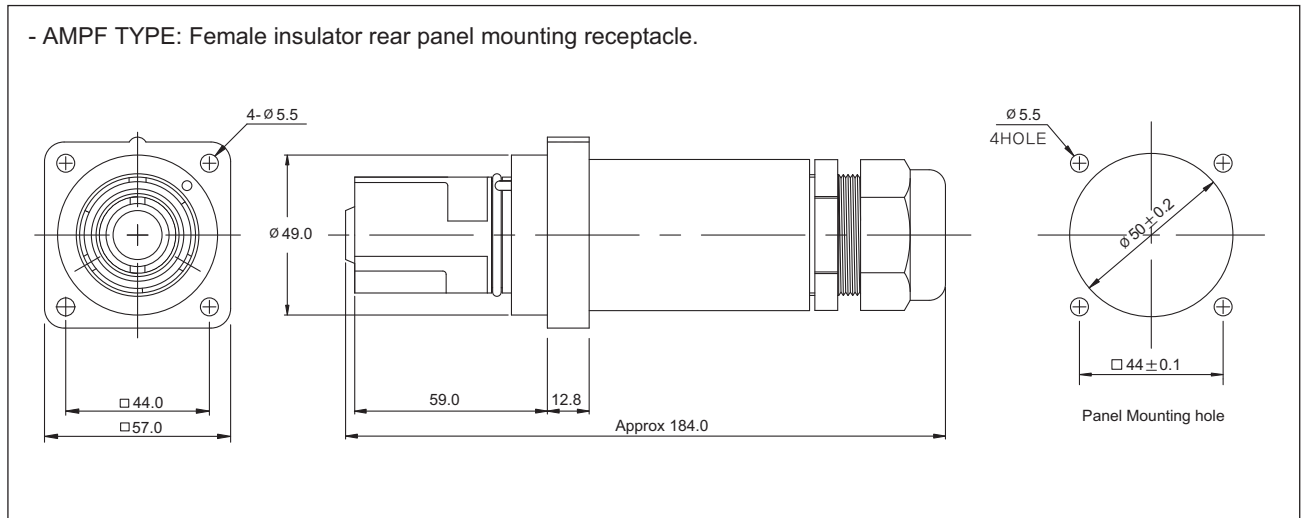
4. Technical Data

Item	High Lock		Low Lock
	AMPF, AMLM	HLPF, HLLM	SLPF, SLLM
Continuous Current Rating	660A@ambient<70 °C	350A@ambient<70 °C	250A@ambient<70 °C
Maximum Current Rating	750A	450A	400A
Contact Size	Special	#4/0	#4/0
Maximum Rated Voltage to Earth	2Kv AC / 3Kv DC	3Kv AC / 4.2Kv DC	1.5Kv AC
Minimum Flashover	9.5Kv DC Peak	12.5Kv DC Peak	-
Operating Temperature Range	-30 °C ~ 125 °C		
Insulation Resistance	Min 100 MΩ @ DC 1,000V		
Ingress Protection (mated)	IP67		
Protection against Electric Shock	IP2X		
Flammability	UL94-V0		

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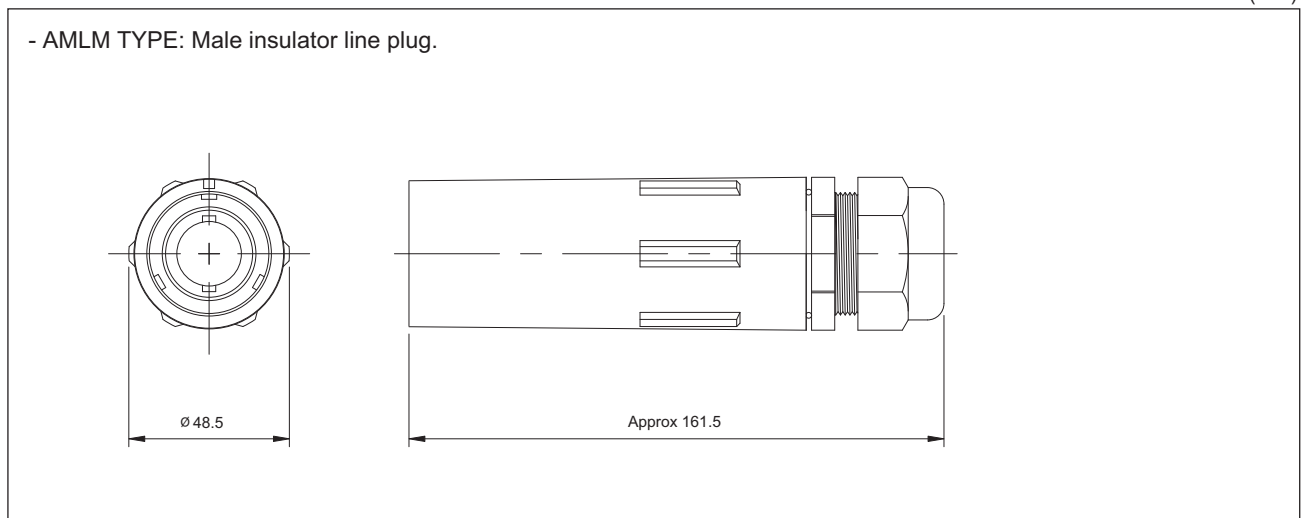
High Lock Box mounting receptacle

(mm)



High Lock Straight Plug

(mm)

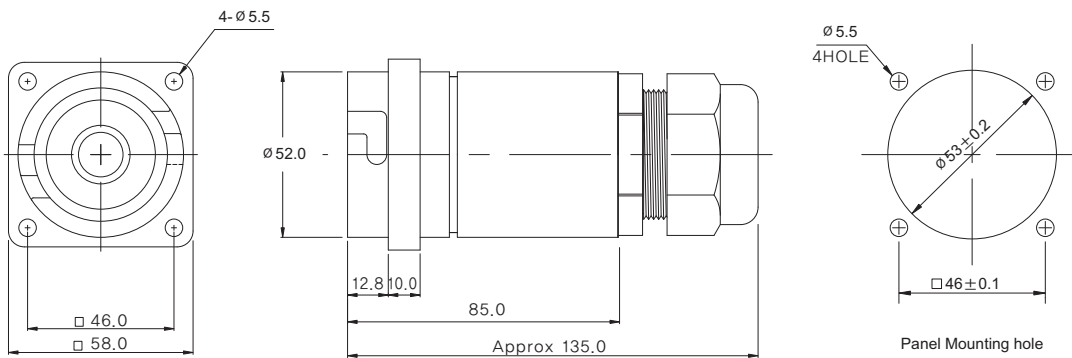


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High Lock Box mounting receptacle

(mm)

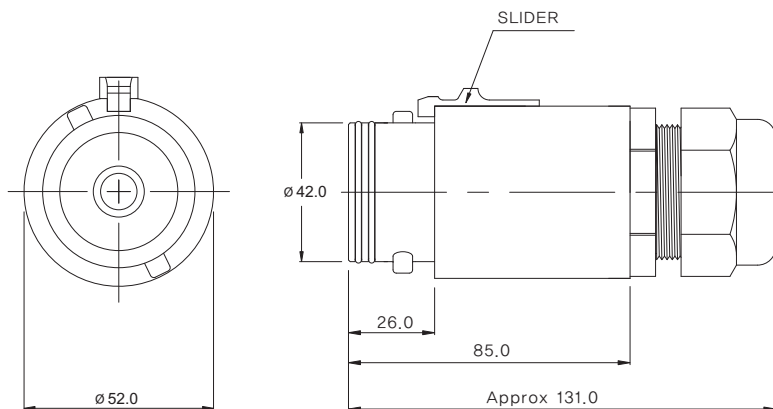
- HLPF TYPE: Female insulator front panel mounting receptacle.



High Lock Straight Plug

(mm)

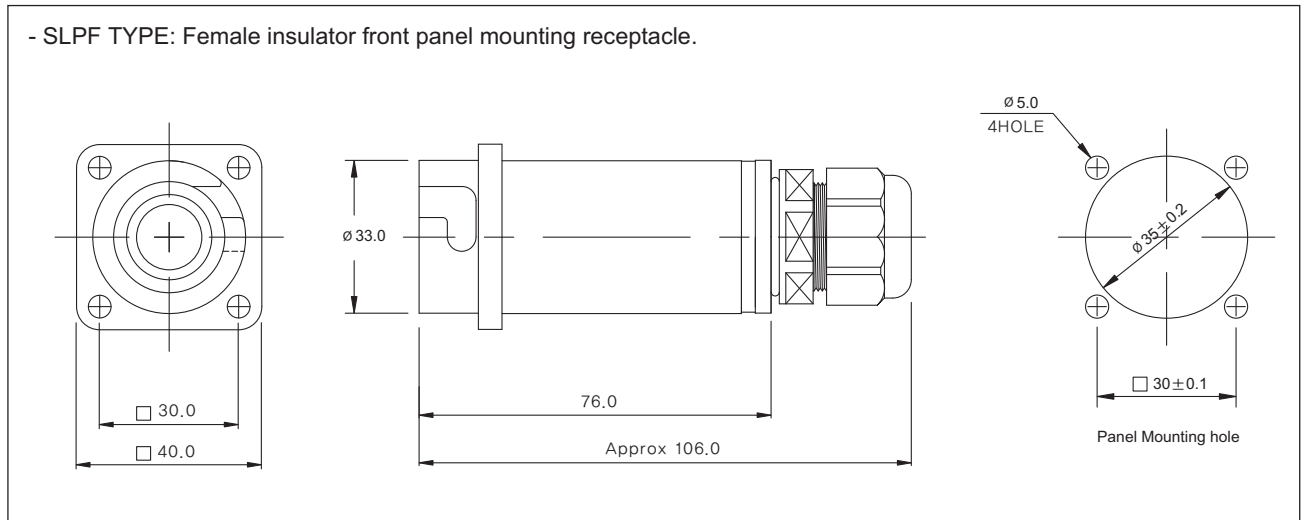
- HLLM TYPE: Male insulator line plug.



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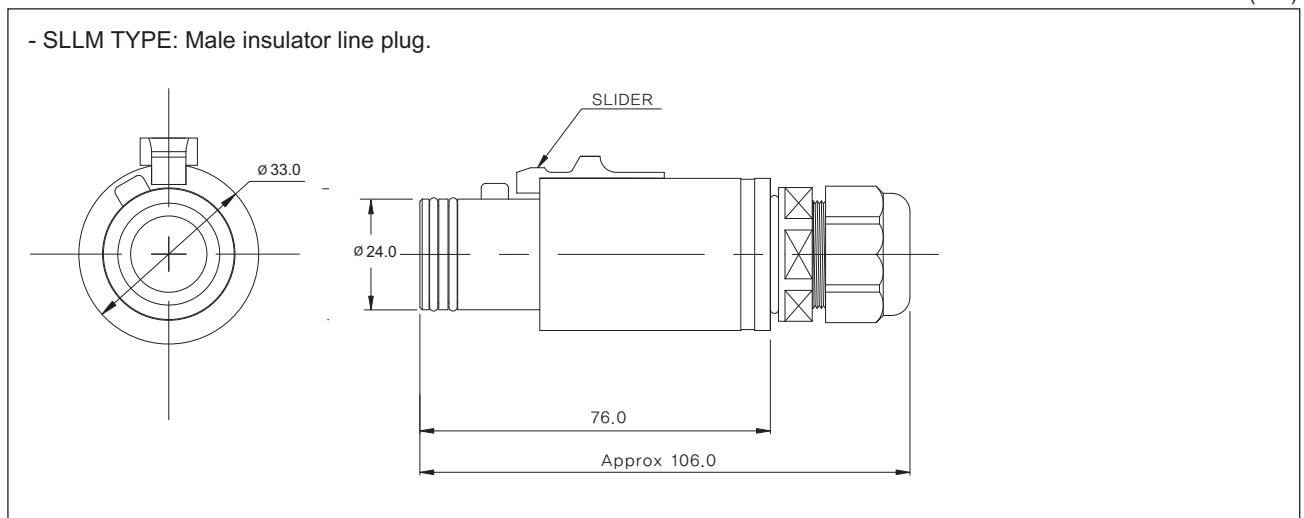
Low Lock Box mounting receptacle

(mm)



Low Lock Straight Plug

(mm)



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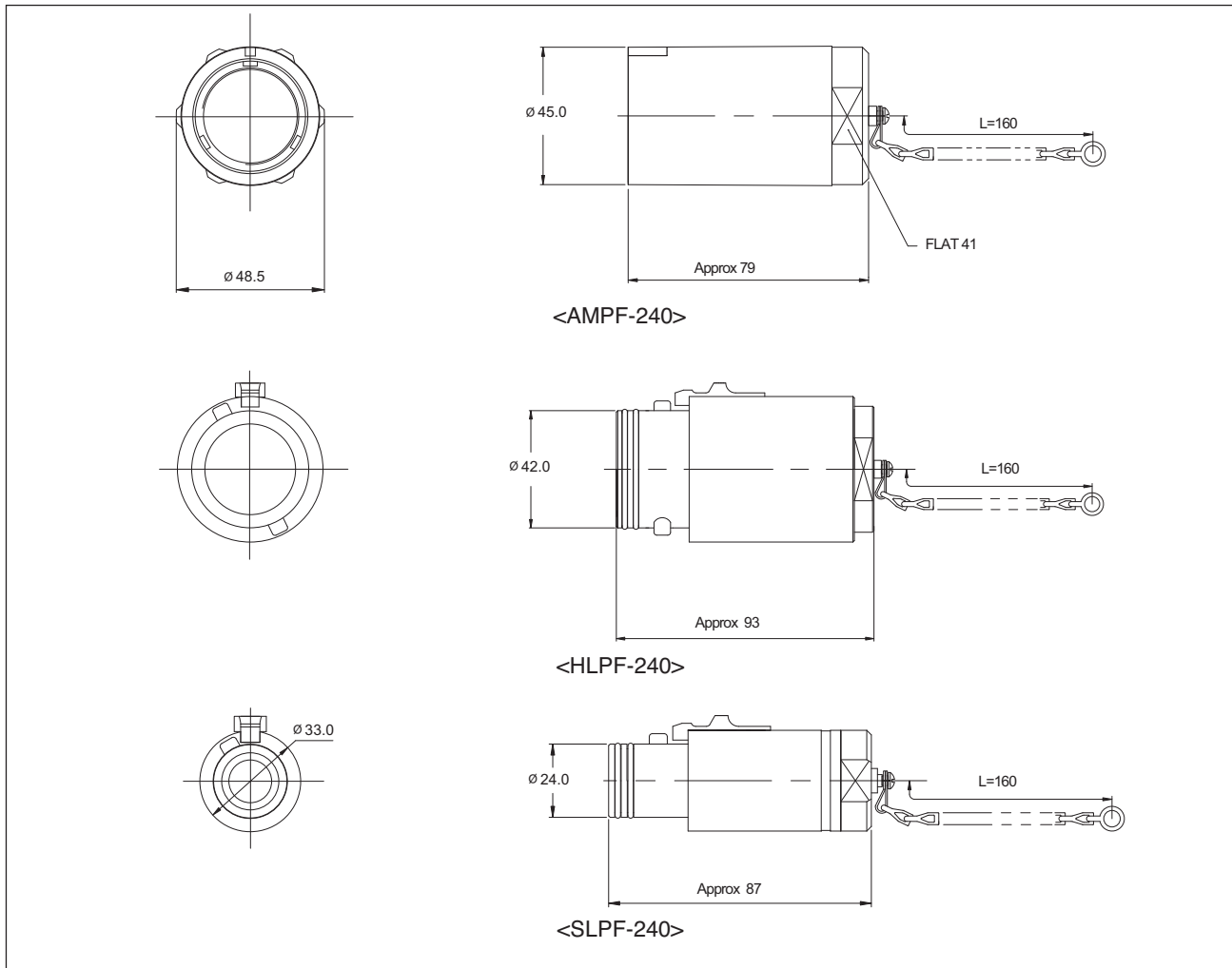
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AMHTC Series

Accessories Dimension

Receptacle Protection Cap

(mm)



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How to order

$\frac{\text{AMPF}}{1} - \frac{\text{S}}{2} - \frac{\text{BK}}{3} - \frac{\text{C95}}{4} - \frac{29}{5}$

1. Connector Type

High Lock		Low Lock	Remarks
AMPF	HLPF	SLPF	Panel Female connector
AMLML	HLLM	SLLM	Line Male connector

2. Contact Gender

S: Socket
P: Pin

3. Colour

Bk: Black
Y : Yellow
R : Red
BL: Blue
GN: Green

4. Contact type

C240 : 240 mm² ~ Crimp
C200 : 200 mm² ~ Crimp
C185 : 185 mm² ~ Crimp
C120 : 120 mm² ~ Crimp
C95 : 95 mm² ~ Crimp
C70 : 70 mm² ~ Crimp
C50 : 50 mm² ~ Crimp
C35 : 35 mm² ~ Crimp
C25 : 25 mm² ~ Crimp
C14 : 14 mm² ~ Crimp

5. Cable grip(Consult factory)

13.5 : PG13.5 (6 ~ 12mm cable OD)
16 : PG16 (10 ~ 14mm cable OD)
21 : PG21 (13 ~ 18mm cable OD)
29 : PG29 (18 ~ 25mm cable OD)
36 : PG36 (22 ~ 32mm cable OD)
M20S : M20X1.5 (6 ~ 12mm cable OD)
M20L : M20X1.5 (10 ~ 14mm cable OD)
M25 : M25X1.5 (13 ~ 18mm cable OD)
M32 : M32X1.5 (18 ~ 25mm cable OD)
M40 : M40X1.5 (22 ~ 32mm cable OD)



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Contact Size	Wire Size (mm/AWG)	Crimping Tool No.	Removal Tool No.	Remarks
Special Pin	50mm	IZUMI EP-510	AMET-HTCSP	AML M
	70mm			
	90mm			
	120mm			
	185mm			
Special Socket	50mm	IZUMI EP-510	AMET-HTCSP	AMP F
	70mm			
	90mm			
	120mm			
	185mm			
#4/0 Pin	16mm	TP=201328 or IZUMI EP-510B	AMET-JC4/0	HLL M
	25mm			
	35mm			
	38mm		AMET-SLL M	SLL M
	50mm			
	70mm			
	95mm			
#4/0 Socket	16mm	TP=201328 or IZUMI EP-510B	AMET-JC4/0	HLP F SLP F
	25mm			
	35mm			
	38mm			
	50mm			
	70mm			
	95mm			



TP-201328



AMET



IZUMI EP-510B