

# **Amphoton**

## JUNCTION BOX

# **Amphenol<sup>®</sup>**

## Solar Energy



Since 1932 Amphenol has been the interconnect technology provider of choice to industry leading companies throughout the world. With a broad and diverse product portfolio, Amphenol is able to develop the right solutions for our customers across the diverse segments of the rapidly expanding electronics market.

With dedicated employees working at 85 facilities in more than 30 countries. Amphenol has the unique advantage of having both diversified global reach while still being a focused organization.

**Amphenol can help you power the planet with the sun.**

## Amphoton PV-090729 and PV-090708 series

### Features:

- Sealed design with high heat dissipation
- TÜV/UL approval



## Amphoton PV-090730 series

### Features:

- Sealed design with high heat dissipation
- TÜV/UL dual approval



## Amphoton PV-090809 series

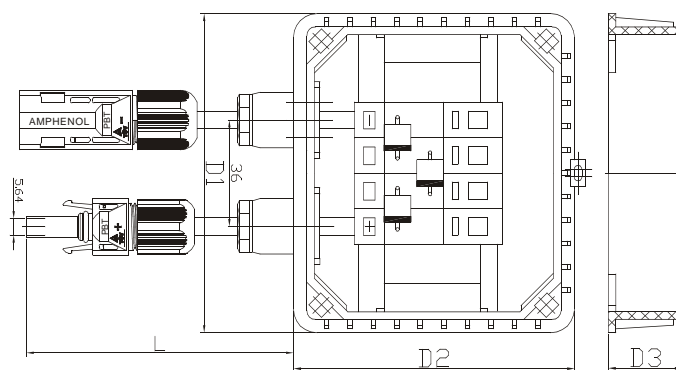
### Features:

- Sealed design with high heat dissipation
- TÜV approval



### Technical Data

Order No.	1	2	3	4	5
Part Number	PV-090729-003	PV-090729-006	PV-090808-001	PV-090808-002	PV-090808-003
Version	4 poles	4 poles	2 poles	3 poles	4 poles
Rated current	20A	20A	20A	20A	20A
Rated voltage	DC1000V(TÜV), DC600V(UL)	DC1000V(TÜV), DC600V(UL)	DC1000V(TÜV)	DC1000V(TÜV)	DC1000V(TÜV)
Number of bypass diodes	3	6	1	2	3
Connection cross-section	4mm <sup>2</sup> , AWG12	4mm <sup>2</sup> , AWG12	4mm <sup>2</sup> , AWG12	4mm <sup>2</sup> , AWG12	4mm <sup>2</sup> , AWG12
Temperature range	-40°C up to +85°C	-40°C up to +85	-40°C up to +85°C	-40°C up to +85°C	-40°C up to +85°C
Protection degree	IP 65	IP 65	IP 65	IP 65	IP 65
Dimensions	150 x 130 x 26mm	150 x 130 x 26mm	89x 80 x 22.5mm	89 x 80 x 22.5mm	108 x 95 x 25mm
Flame class	UL94-V0	UL94-V0	UL94-V0	UL94-V0	UL94-V0
Certificate	TÜV/UL	TÜV/UL	TÜV	TÜV	TÜV

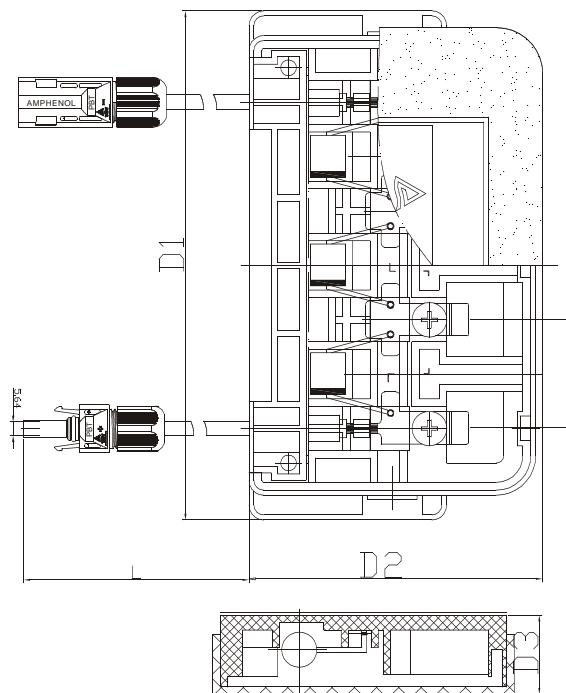


D3	22.5	PV-090808-001
D2	80	PV-090808-002
D1	89	
D3	25	PV-090729-003
D2	130	PV-090729-006
D1	150	
D3	25	PV-090808-003
D2	95	
D1	108	

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### Technical Data

Order No.	6	7	8
Part Number	PV-090730-002	PV-090730-003	PV-090730-006
Version	3 poles	4 poles	4 poles
Rated current	20A	20A	20A
Rated voltage	DC1000V(TÜV), DC600V(UL)	DC1000V(TÜV), DC600V(UL)	DC1000V(TÜV), DC600V(UL)
Number of bypass diodes	2	3	6
Connection cross-section	4mm <sup>2</sup> , AWG12	4mm <sup>2</sup> , AWG12	4mm <sup>2</sup> , AWG12
Temperature range	-40°C up to +85°C	-40°C up to +85°C	-40°C up to +85°C
Protetion degree	IP 65	IP 65	IP 65
Dimensions	103 x 58 x 16mm	103 x 58 x 16mm	103 x 58 x 16mm
Flame class	UL94-V0	UL94-V0	UL94-V0
Certificate	TÜV/UL	TÜV/UL	TÜV/UL



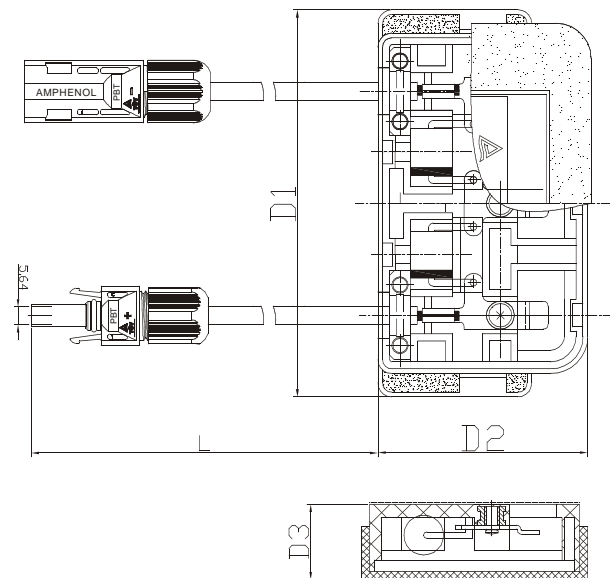
D3	16	PV-090730-002
D2	58	PV-090730-003
D1	103	PV-090730-006

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### Technical Data

Order No.	12	13
Part Number	PV-090809-001	PV-090809-002
Version	2 poles	3 poles
Rated current	20A	20A
Rated voltage	DC1000V(TÜV )	DC1000V(TÜV )
Number of bypass diodes	1	2
Connection cross-section	4mm <sup>2</sup> , AWG12	4mm <sup>2</sup> , AWG12
Temperature range	-40°C up to +85°C	-40°C up to +85°C
Protetion degree	IP 65	IP 65
Dimensions	72 x 48 x 16mm	83 x 45 x 16.5mm
Flame class	UL94-V0	UL94-V0
Certificate	TÜV	TÜV



D3	16	PV-090809-001
D2	48	
D1	72	
D3	16.5	PV-090809-002
D2	45	
D1	83	

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## How to order Amphoton Junction Box Assembly

**AP-**  
1

1. Junction Box series

**4.0**  
4

4. Connector/Cable cross section:  
2.5: 2.5mm<sup>2</sup> - 14 AWG  
4.0: 4.0mm<sup>2</sup> - 12 AWG  
6.0: 6.0mm<sup>2</sup> - 10 AWG

**90**  
5

5. Cable length:  
Specify in CM

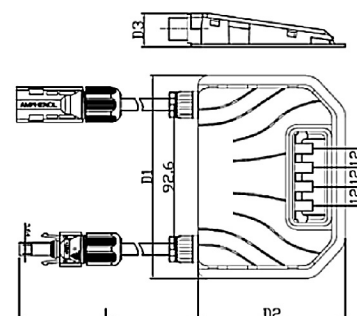
**03**  
2

2. Junction Box Order No.

**P**  
3

3. Cable type:  
P: Power-Link solar cable  
A: Armor-Link solar cable

AP- 03 / P / 4.0 / 90  
1 2 3 4 5



### H4 connector

#### Features

- Self-locking to meet NEC2008
- Higher current
- Highest IP degree
- Lower power loss



### Ordering information

Part No.	Description	Wire range
PV-090506-000	H4 Cable Connector, Mated Pair	6.0mm <sup>2</sup> /10AWG
PV-090507-000	H4 Cable Connector, Mated Pair	2.5mm <sup>2</sup> /14AWG
PV-090508-000	H4 Cable Connector, Mated Pair	4.0mm <sup>2</sup> /12AWG



### PowerLink solar cable

#### Features

- PV-WIRE rated
- Better flame retardant (VW-1 rating)
- Better sunlight resistance
- Flexibility at low temperature
- Thermoplastic-insulated conductor



### Ordering information

Part No.	Description	Conductor cross section
PV-10-663060-004	PoweLink solar cable	2.5mm <sup>2</sup> /14AWG
PV-10-663060-005	PoweLink solar cable	4.0mm <sup>2</sup> /12AWG
PV-10-663060-006	PoweLink solar cable	6.0mm <sup>2</sup> /10AWG

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