

Flexible wiring systems for stationary loads.  
Select from six types according to  
the capacity desired, from single-phase  
20A to three-phase 400A.

## FactoryLine








# ⚠ Safety Precautions

The precautions describe what must be observed not to harm humans nor cause property damage.

Ask an electrical contractor for troubleshooting and maintenance such as expansion of this product. In such case, be sure to pass these Instruction and Installation Manuals to the contractor.

## ■ Precautions on installation

Installing this product requires the qualification as an electrical worker. Be sure to ask a contractor

⚠Warning			
 Prohibited	<ul style="list-style-type: none"><li>● <b>Do not make any modification to this product.</b> Doing so will result in an electric shock, a fire, or a drop.</li><li>● <b>Do not use it in places with combustion gas.</b> Cause of the explosion.</li><li>● <b>Do not install the illuminator that becomes a hightemperature like the white heat ball etc.</b> Not doing so will result in an electric shock, a fire.</li></ul>	 Compulsory	<ul style="list-style-type: none"><li>● <b>Install this product in accordance with the Electrical Equipment Technical Standards (Law) and the Internal Wiring Regulations.</b> Use proper overcurrent circuit breakers on the primary side ofpower supply. Choose a size of cable used to supply power to Factory Line suitable for overcurrent circuit breakers to protect the branch circuit and for the rated current. Not doing so will result in an electric shock, a fire, or a drop.</li><li>● <b>Installation must be carried out according to the "Installation Manual" included with the product.</b> ~Improper installation may result in electric shock, fire, or damage due to equipment falling.~</li></ul>
⚠Caution			
 Prohibited	<ul style="list-style-type: none"><li>● <b>This product is dedicated to ordinary indoor use.</b> Do not use the product in a humid place, a place subject to vibration, a place subject to rain, a wet place, a place where corrosive gas is generated, a place where oil fumes are generated, a place where cutting oil, etc. are directly applied, or a place where the product is affected by heat, such as the top of a heater. Doing so may cause electric shock, fire, or falling.</li><li>● <b>Do not install Factory Line 20, 30, 60, and 100 through building structures.</b> Doing so may cause a fire.</li><li>● <b>Do not cut the duct of the Factory Line 60, 200 because the duct is because the both ends of the duct are specially processed.</b> This may cause electric shock or fire fall.</li><li>● <b>Do not slide the plug while it is attached to the main unit.</b> Poor contact will cause a fire.</li></ul>	 Compulsory	<ul style="list-style-type: none"><li>● <b>Orientation of the duct and shall decide the orientation of the plug with breaker. (The Factory Line 400 terminal plug with breaker [box type] is not polarized.)</b> When installed in the opposite direction may cause electric shock or fire fall.</li><li>● <b>When branch circuits are taken from the Factory Line, it is required by law to install a branch circuit protection device such as terminal plug with a breaker, etc.</b> Failure to install a protective device may result in a fire.</li><li>● <b>For the Factory Line 100, 60, and 30, be sure to check the polarity and voltage classification to prevent misuse of 100 V and 200 V.</b> For the Factory Line 100 and 60, be sure to attach the voltage indication label included with the product to the connecting parts, and for the Factory Line 30, be sure to attach the product name label and voltage indication label to the main unit and connecting parts. Incorrect polarity or voltage may cause burnout or fire.</li><li>● <b>When using the plugs by relocating them, make sure to match the polarity and voltage classification of the main unit.</b> Failure to do so may result in electric shock or fire.</li><li>● <b>When using a 15 A outlet plug for the Factory Line 30, use it as a 15 A or 20 A branch circuit in accordance with regulations.</b></li><li>● <b>When cutting or processing, use protective equipment such as glasses.</b> Failure to do so may result in injury.</li><li>● <b>After cutting procedure, remove burrs with a sandpaper or the similar tools.</b> Failure to do so may result in injury.</li></ul>
 Compulsory	<ul style="list-style-type: none"><li>● <b>The opening of the duct should be in a straight line downward.</b> Poor contact may cause fire.</li><li>● <b>If the Factory Line 20 is installed horizontally, they should be installed in a location where people cannot easily touch them (e.g., 1.8 m or more) and duct covers must be used.</b> Failure to install a duct cover, causing a fire due to ingress of dust.</li><li>● <b>With the Factory Line 400, ensure that the power supply hole positions and the hanger positions do not overlap.</b> Doing so will result in a fire, or a drop.</li><li>● <b>When power supply holes of the Factory Line 400 are not in use, be sure to attach the power supply hole covers.</b> Failing to do so may lead to electric shock or fire caused by dust or other materials.</li></ul>		

## ■ Precautions on use

This product has a limited life span, with a standard use period of 10 years. Deterioration progresses every year, although the progression varies depending on the conditions of use and location of use. Although we are striving to improve the quality and reliability of our products, deterioration will eventually make it difficult to continue using them. To ensure long use of the product, please be sure to perform periodic inspections at least once a year based on the "Safety Check Sheet" by yourself. If any abnormality is found during the inspection, please ask an electrician to take action. Also, have an inspection by electrician once every three years. In addition to the inspection, please observe the following points along with the inspections. Please ask an electrician to perform maintenance work such as troubleshooting or adding terminal plugs to the product. Qualification of an electrician is required to connect, disconnect, and relocate terminal plugs that are used as branch circuits, such as a branch connection from Factory Line 100 to Factory Line 30. On the other hand, the connection, disconnection, and relocation of terminal plugs used for direct connection of load equipment, not for branch circuits can be performed without the qualification of an electrician. There may be restrictions on the number of 15A plugs that can be connected to the Factory Line 30. Please consult an electrician in advance. Be sure to turn off the power supply before connecting, disconnecting, relocating, or adding plugs such as terminal plugs and outlet plugs.

## ⚠ Warning

- **Do not disassemble or modify the product.** Doing so may cause electric shock, fire, or a fall.
- **Do not attach any devices other than the dedicated device to the main body of the Factory Line, or do not apply a load greater than that of the dedicated device.** Doing so may cause the product to fall.

	Allowable hanging load
Factory Line 20, 30	98 N
Factory Line 60, 100, 200	196 N
Factory Line 400	294 N

※ 1 kgf=9.8 N

- **Do not install incandescent lamps that become high-temperature.** Doing so may cause a fire.

- **If any abnormality occurs, immediately turn OFF the power supply, and then contact your electrical worker to take necessary actions.**(In such case, be sure to pass Instruction and Installation Manuals ) Not doing so will result in an electric shock, a fire, or a drop.
- **Use within the rated voltage and load capacities.** Not doing so will result in a fire.

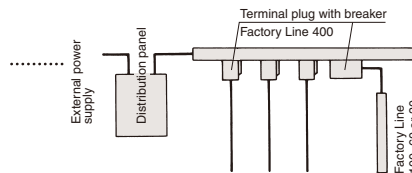
## ⚠ Caution

- **This product is dedicated to ordinary indoor use.** Do not use the product in a humid place, a place subject to vibration, a place subject to rain, a wet place, a place where corrosive gas is generated, a place where oil fumes are generated, a place where cutting oil, etc. are directly applied, or a place where the product is affected by heat, such as the top of a heater. Doing so may cause electric shock, fire, or falling.
- **Do not pull the cable of the plug.** Doing so may cause fire or fall.
- **Do not slide the plug while it is attached to the main unit.** Failure to do so may cause fire due to poor contact.
- **Do not use the dedicated 100 V plug of the Factory Line 100 and 60 for the Factory Line 30 because the grounding method and dimensions are different.** Do not use the plugs of Factory Line 30 for the 2P 20A circuit of Factory Line 100 and 60 as well. Failure to do so may cause electric shock or fire.

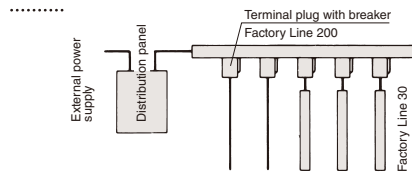
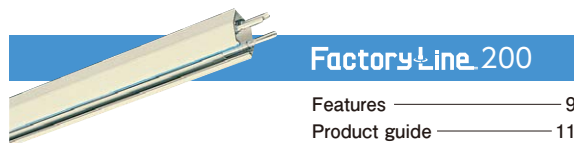
- **Before check for the product, be sure to turn OFF the power supply.** Not doing so may result in an electric shock.
- **If an earthquake occurs, turn OFF the power supply, and then ensure that thorough mounting strength is provided.**If NOT, consult with your electrical contractor. In such case, be sure to pass these Installation and Instruction Manuals to the contractor. Not doing so will result in a drop.
- **Use the range of -10°C ~ 40°C ambient temperature** The use without of range, burn, or cause a fire.
- **Attach the plug in the right direction.** If it attaches to reverse, it will become a cause of an electric shock, a fire, and fall.
- **Use this product for the transmission of information, The transmission performance might be deteriorated because of the signal decay in connected part.**

# Factory Line-a flexible wiring system for stationary loads.

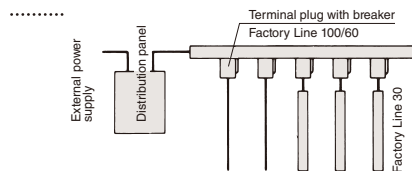
## Branching of the line and power take-off can be accomplished from any location.



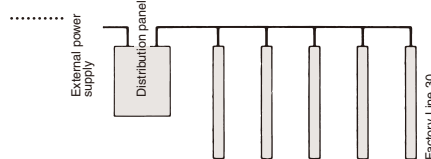
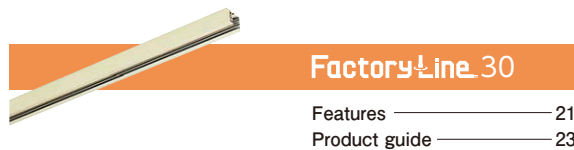
For supplying power to heavy machinery, providing one three-phase power supply circuit (maximum 400A).



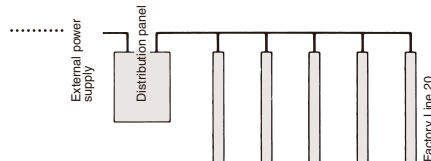
To supply industrial driving power you can take one three-phase 200A or single-phase three-wire 200A.



For both main lines and branch lines, providing both a three-phase power supply (maximum 100A) and a single-phase power supply (maximum 20A).  
For both main lines and branch lines, providing both a three-phase power supply (maximum 60A) and a single-phase power supply (maximum 20A).



For branch lines 30A capacity. Provides either one three-phase power supply circuit or two single-phase power supply circuit.



For small branch lines. Provides a single-phase power supply of up to 20A.

### Plugs can be freely connected, removed, added, and moved.

In all Factory Line systems the plugs that supply electrical power from the ducts to the load or the branch lines can be freely connected and removed at any location. Varying supply needs, such as changes in the layout or quantity of production line equipment, can be quickly and easily satisfied simply by moving or connecting more plugs. Unlike conventional electrical wiring systems, the Factory Line system does not need to be rewired. This significantly reduces both the effort and cost of making such changes.



Factory Line 400



Factory Line 200



Factory Line 100/60



Factory Line 30



Factory Line 20

### The amount of factory wiring can be greatly reduced.

With the Factory Line 100 or Factory Line 60, both a three-phase power supply and a single-phase power supply can be obtained simultaneously. Because, for example, both drive power and the electrical outlet power supply can be handled from a single wiring line, the wiring is simplified. In addition, with the Factory Line 30, two single-phase power supply circuits can be obtained simultaneously, so both the lighting power supply and the electrical power supply can be combined in a single line.

### Both safety and appearance are improved.

By replacing conventional power supply conduit wiring with the Factory Line, all of the wiring that previously cluttered the floor and other areas can be neatly eliminated, thus preventing accidents or injury. In addition, in situations such as metalwork factories, if the wiring is on the floor, metal chips can enter and cause shorting, but with the Factory Line all danger of problems such as these occurring is eliminated. Furthermore, because the Factory Line system is equipped with various types of breaker-equipped plugs, it provides increased safety in the event of unforeseen emergencies.



# Actual examples of the wide range of Factory Line applications



▲ Electronic component assembly line



▲ Large stores



▲ Electrical component assembly line





▲ Automotive assembly line

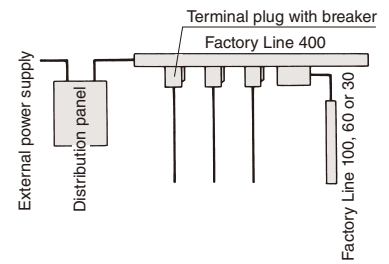


▲ Hospitals



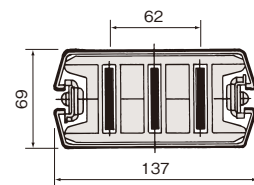
▲ Plastic molding factory

# FactoryLine 400



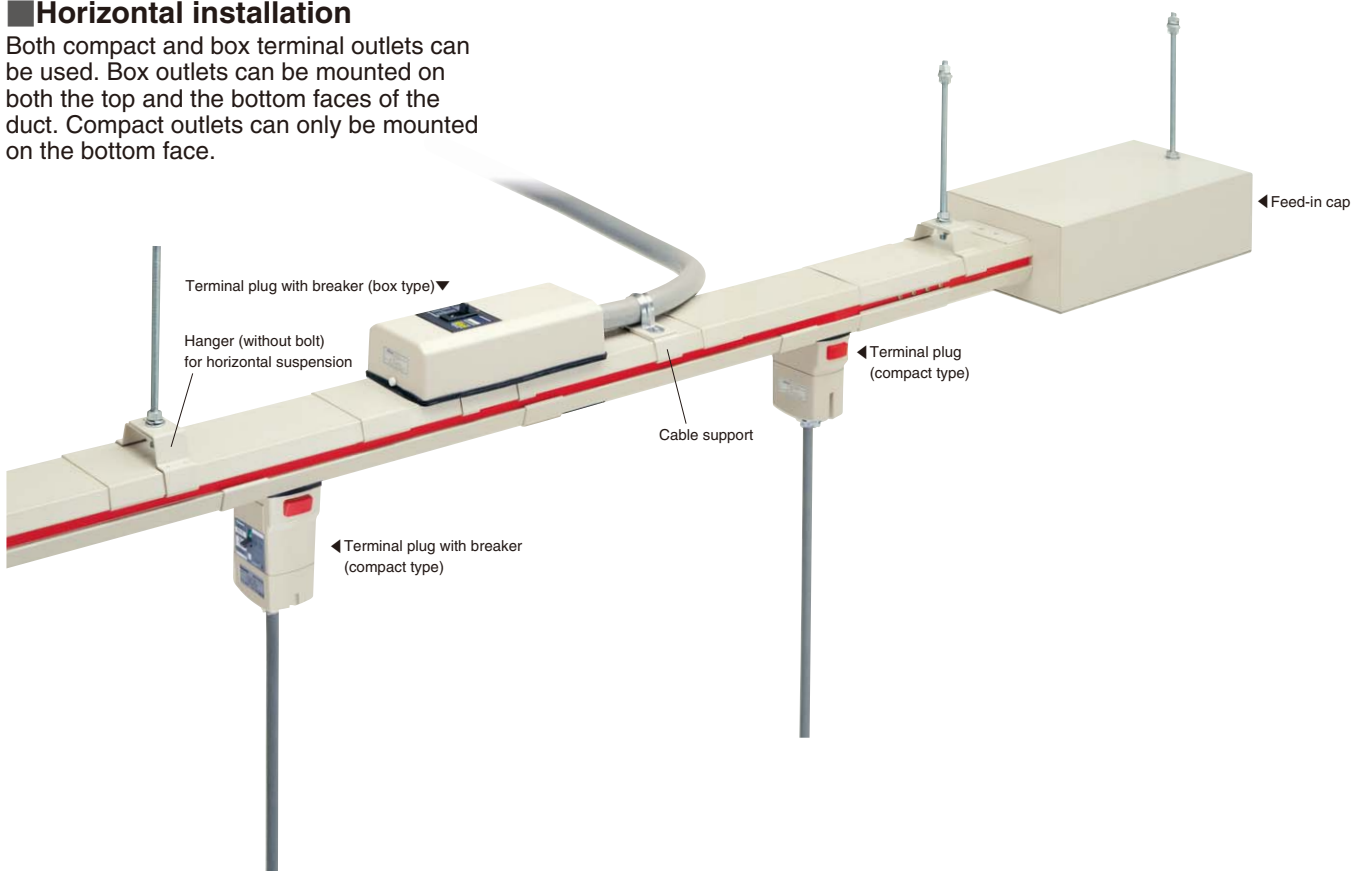
## Factory Line 400 is a plug-in duct system which provides a three-phase power supply for high power loads.

Factory Line 400 is a three-phase, 400 A plug-in duct system for branch lines. It can also be used for direct branching to high power loads such as large machine tools, lathes, presses, dryers, etc., and as a main line for low power branch circuits using Factory Line 100, 60, or 30. A wide selection of terminal outlets with breakers and electrical outlets is available for a very safe and reliable wiring system.



### Horizontal installation

Both compact and box terminal outlets can be used. Box outlets can be mounted on both the top and the bottom faces of the duct. Compact outlets can only be mounted on the bottom face.

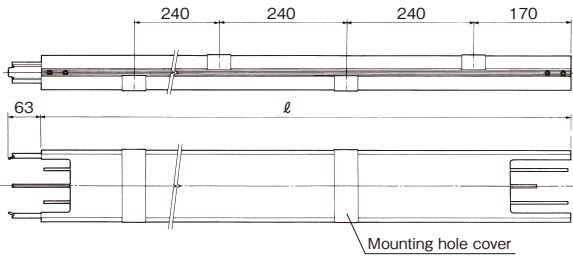
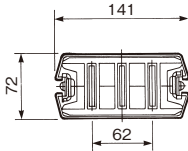
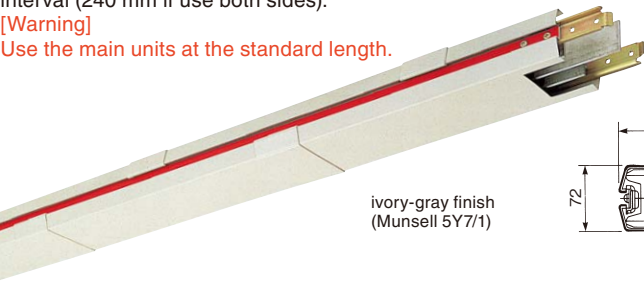






Factory Line 400 main unit (ivory-gray finish)

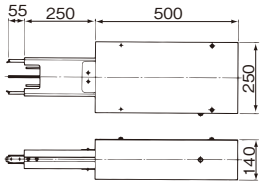
3P 400A 300V with ground.  
Conductor equipped duct for a three-phase three-wire circuit.  
Terminal plugs can be installed 480 mm interval (240 mm if use both sides).  
[Warning]  
Use the main units at the standard length.



Cat. No.	Length <i>l</i> (mm)	Weight (kg)
DH28110	1,000	9.3
DH28120	2,000	18.5
DH28130	3,000	27.8

Feed-in cap (ivory-gray finish)

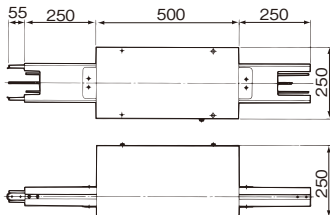
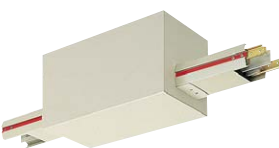
3P 400A 300V with ground.  
Supplying power at an end of the main unit.  
Use one joiner to connect with main unit.  
Crimp-on terminals required: 200 to 250 mm<sup>2</sup>.



Cat. No.	Weight (kg)
DH2821	10.8

Center feed-in joiner (ivory-gray finish)

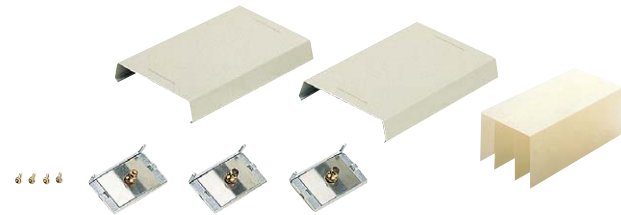
3P 400A 300V with ground.  
Supplying power between the main units and connecting them.  
Crimp-on terminals required: 200 to 250 mm<sup>2</sup>.



Cat. No.	Weight (kg)
DH2822	19.9

Joiner (ivory-gray finish)

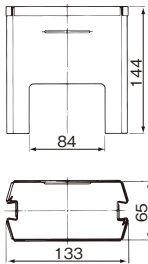
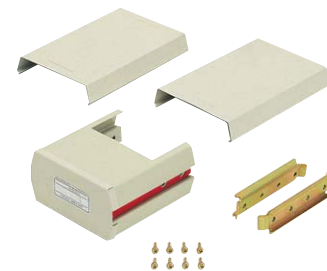
3P 400A 300V.  
Connecting main units and conductors. Consists of three conductor couplers, one separator, two connection covers and four mounting screws.



Cat. No.	Weight (kg)
DH2831	1.1

End cap (ivory-gray finish)

Closing an end of the main unit.  
Consists of two connection covers and two connection fittings and eight mounting screws.



Cat. No.	Weight (kg)
DH2823	0.5



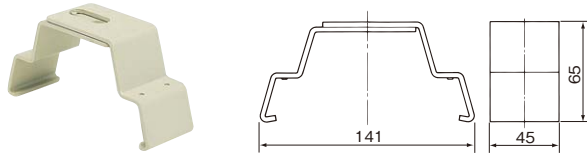
**Hanger (without bolt) for horizontal suspension (ivory-gray finish)**

Attaching main unit directly to the building structure or suspending with supplied bolts.

Support intervals : Shorter than 1.5m.

**[Caution]**

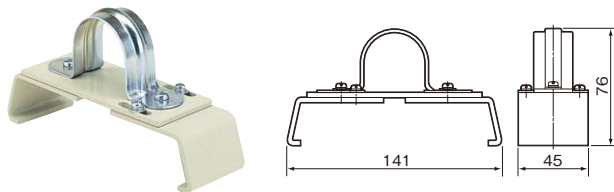
Suspending weight must be below 294N(30kgf) on each hanger.



Cat. No.	Weight (kg)
<b>DH2854</b>	0.3

**Cable support (ivory-gray finish)**

Secure the connecting cable to the box type terminal plug with breaker.



Cat. No.	Type	Weight (kg)
<b>DH2897</b>	For 100A	0.35
<b>DH2898</b>	For 225A	0.35

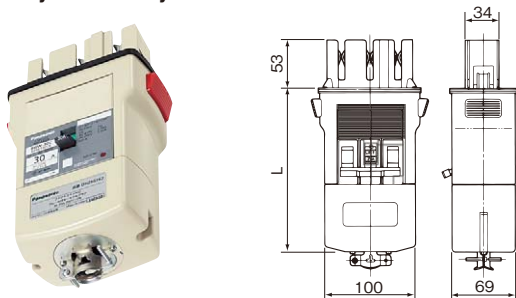
**Terminal plug with breaker (compact type) (ivory-gray finish)**

3P 20A/30A/60A 200V with ground.

Use for extracting three-phase power supply.

Built-in circuit breaker(20A/30A:BBW-30C, 60A:BBW-60S)

**For Factory Line 400 system.**



Cat. No.	Rating	L	Weight (kg)
<b>DH2882K2</b>	3P20A200V with ground	164	1.3
<b>DH2883K2</b>	3P30A200V with ground	164	1.3
<b>DH2886K2</b>	3P60A200V with ground	184	1.3

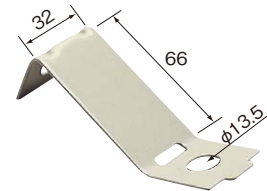
**Anti-swing fixture (ivory-gray finish)**

Prevent suspension bolts from swinging.

Default angle is 45 degrees. You can bend to fit the site.

Use two pieces if secure both sides.

**For Factory Line 400, 200, 100/60 and 30 systems.**



Cat. No.	Weight (kg)
<b>DL741Y</b>	0.1

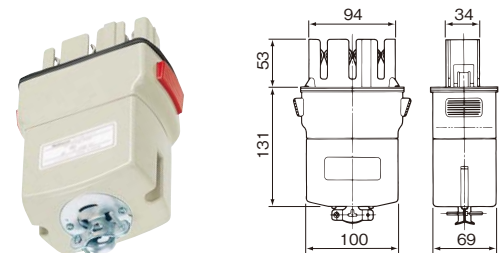
**Terminal plug (compact type) (ivory-gray finish)**

3P 60A 300V with ground.

Use for extracting three-phase power supply.

No built-in breaker.

**For Factory Line 400 system.**



Cat. No.	Rating	Weight (kg)
<b>DH2896</b>	3P60A300V with ground	0.8

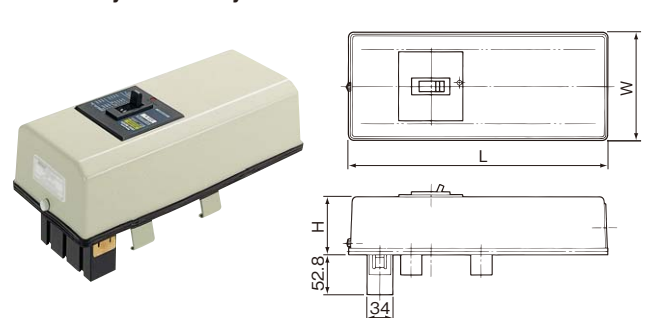
**Terminal plug with breaker (box type) (ivory-gray finish)**

3P 100A/225A 200V with ground.

Use for extracting three-phase power supply.

Built-in circuit breaker(100A:BBW-100S, 225A:BBW-225)

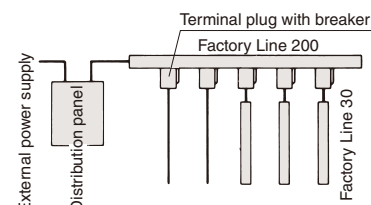
**For Factory Line 400 system.**



**Note:** If an external operation handle is needed, contact the Panasonic

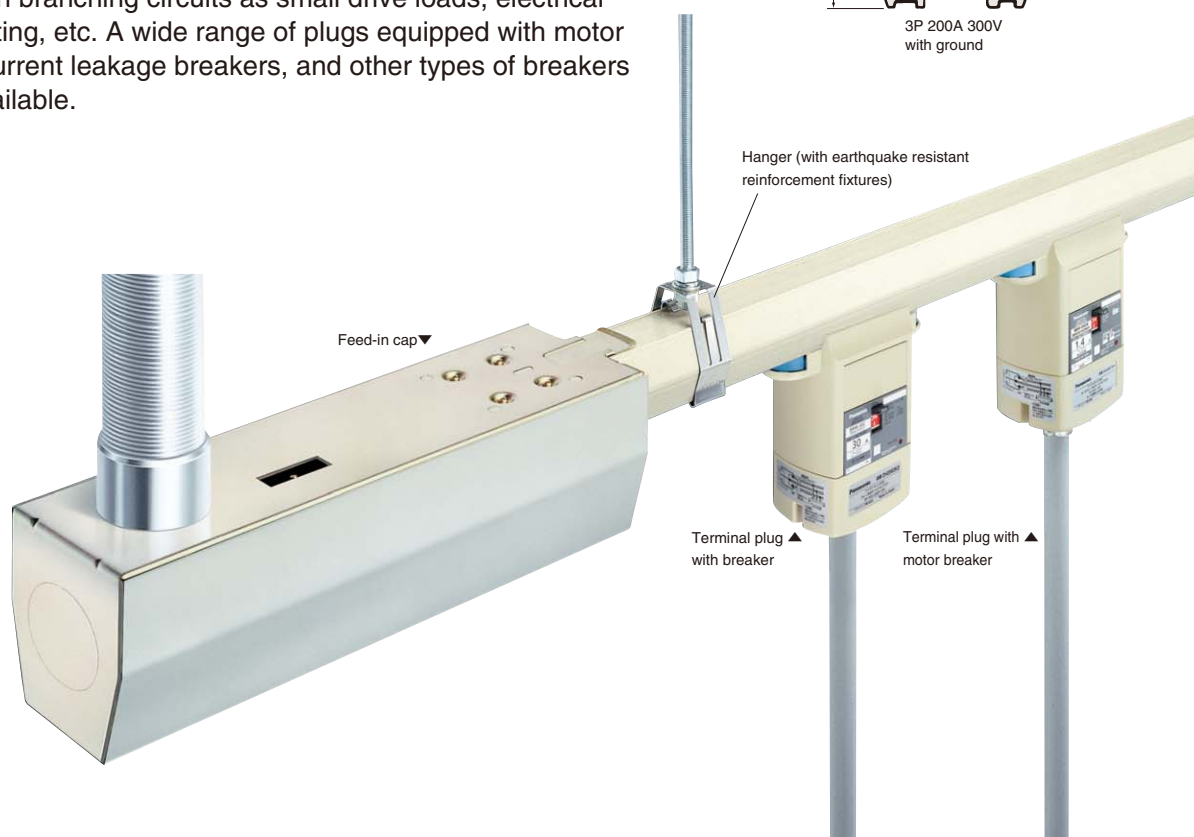
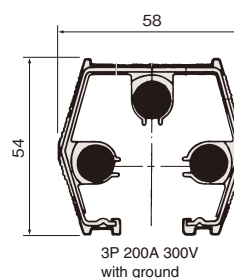
Cat. No.	Rating	W	L	H	Weight (kg)
<b>DH2887K1</b>	3P100A200V with ground	146	340	82	2.5
<b>DH2888K1</b>	3P225A200V with ground	163	453	115	5.2

# FactoryLine 200



**The Factory Line 200 is a high-capacity duct capable of providing either a three-phase or a three-wire single-phase power supply for drive power.**

The Factory Line 200 is a high-capacity duct for providing a power supply for drive power, and it contains one three-phase 200A or single-phase three-wire 200A conductor circuit. It is ideal for supplying the power for driving large presses, molding and forming machines and machine tools. In addition, it can also be used as the main line for the connection of the Factory Line 30 in order to provide such branching circuits as small drive loads, electrical outlets, lighting, etc. A wide range of plugs equipped with motor breakers, current leakage breakers, and other types of breakers are also available.

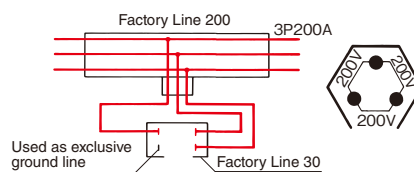




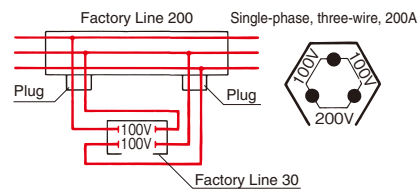


### ■ Method for branching from Factory Line 200 to Factory Line 30.

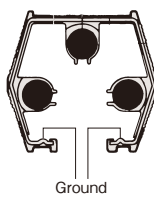
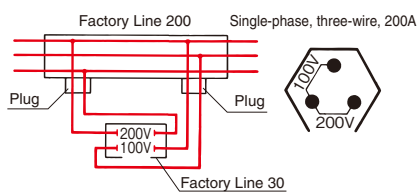
- To obtain a single three-phase circuit from Factory Line 200



- To obtain two single-phase 100V circuits from Factory Line 200



- To obtain single-phase 100V and single-phase 200V from Factory Line 200



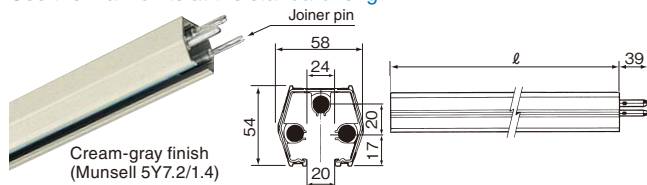
3P 200A 300V circuit  
For direct branching to large  
drive loads or for branching  
to a Factory Line 30.

## Factory Line 200 main unit (cream-gray finish)

3P 200A 300V with ground.  
Conductor equipped duct for a the three-phase three-wire circuit. Attaches a joiner-pin protect cap.

[Warning]

Use the main units at the standard length.



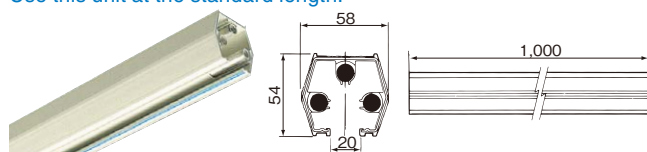
Cat. No.	Length $\ell$ (mm)	Weight (kg)
DH2511	1,000	4.8
DH2512	2,000	9.5
DH2513	3,000	14.3

## Factory Line 200 auxiliary main unit (cream-gray finish)

3P 200A 300V with ground.  
Feed-in caps can only set at the female end of the Factory Line 200 main unit. In case supplying power at the male end, use this unit for gender changing.

[Warning]

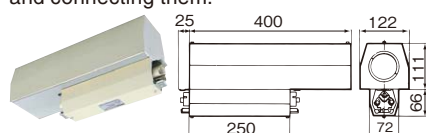
Use this unit at the standard length.



Cat. No.	Weight (kg)
DH2510	4.8

## Center feed-in joiner (cream-gray finish)

3P 200A 300V with ground.  
Supplying power between the main units and connecting them.

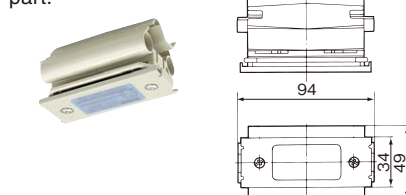


Knockout diameter Upper surface  $\phi 65 \times 1$   
 $\phi 77 \times 1$  electrical cable 3 pieces equipped

Cat. No.	Weight (kg)
DH2522	3.8

## Joiner (cream-gray finish)

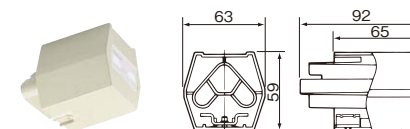
Connecting ground lines of main units electrically. Cannot supply power with this part.



Cat. No.	Weight (kg)
DH2531	0.12

## End cap (cream-gray finish)

Closing an end of the main unit.



Cat. No.	Weight (kg)
DH2523K	0.06

## Hanger (with earthquake resistant reinforcement fixtures)

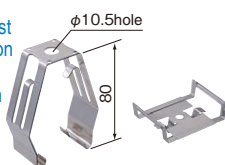
Attaching main unit directly to the building structure or suspending with supplied bolts.  
Support intervals : Shorter than 1.5m.  
Stainless steel hanger.

For Factory Line 200, 100/60 systems.

[Caution]

① Suspending weight must be below 196N(20kgf) on each hanger.

② Main unit cannot fasten directly to the building structure without using hangers.



The DH2452K (no earthquake resistant reinforcement fixtures) is also available.

Cat. No.	Weight (kg)
DH2452K1	0.03

## Earthquake resistant reinforcement fixtures

Used in hanger installations to further strengthen the main unit installation.  
Can be installed at any time to existing hanger installations. As a guide, we recommend installing it to hangers with a bolt length greater than 500 mm.  
Stainless steel hanger.

[Caution]

Cannot be used with ceiling direct-mounting hangers.



Cat. No.	Weight (kg)
DH2457	0.01

## Duct cover (cream-gray finish)

Protect from entering foreign bodies or dusts into main unit.  
Length 1000mm. Made of PVC resin.

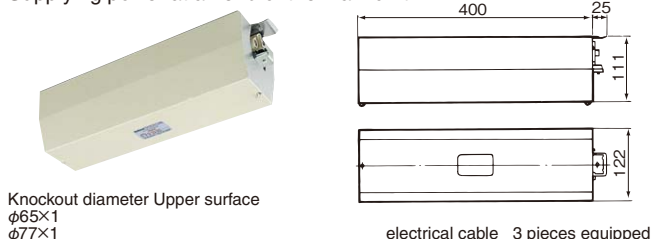
For Factory Line 200, 100/60 and 30 systems.



Cat. No.	Weight (kg)
DH2799	0.06

## Feed-in cap (cream-gray finish)

3P 200A 300V with ground.  
Supplying power at an end of the main unit.



Cat. No.	Weight (kg)
DH2521	2.6

## Ceiling direct-mounting hanger

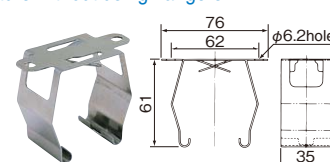
Mounting main unit directly to the ceiling.  
Support intervals : Shorter than 1.5m.  
Stainless steel hanger.

For Factory Line 200 and 100/60 systems.

[Caution]

① Suspending weight must be below 196N(20kgf) on each hanger.

② Main unit cannot fasten directly to the building structure without using hangers.



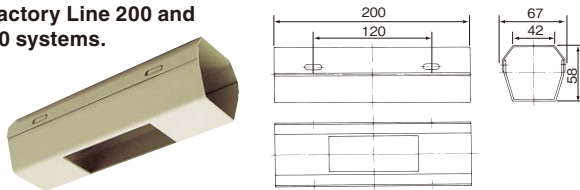
Cat. No.	Weight (kg)
DH2453	0.03



### Connection reinforcement fixture (cream-gray finish)

To keep straight the joint part of the main unit suspended by long bolts.

**For Factory Line 200 and 100/60 systems.**



Cat. No.	Weight (kg)
DH2454	0.51

### Anti-swing fixture (ivory-gray finish)

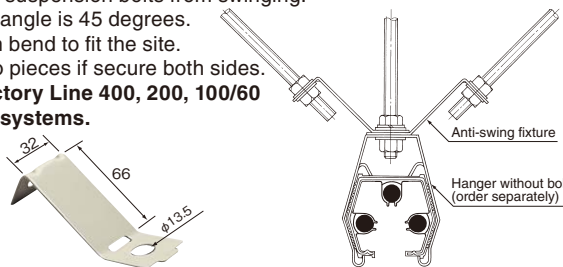
Prevent suspension bolts from swinging.

Default angle is 45 degrees.

You can bend to fit the site.

Use two pieces if secure both sides.

**For Factory Line 400, 200, 100/60 and 30 systems.**



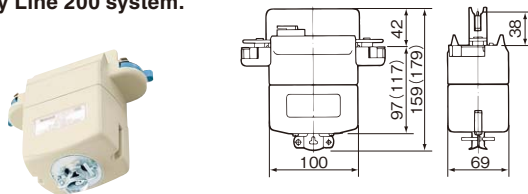
Cat. No.	Weight (kg)
DL741Y	0.1

### Terminal plug (cream-gray finish)

3P 30A/60A 300V with ground.

Use for extracting three-phase power supply or single-phase power supply.

**For Factory Line 200 system.**



The inner size of ( ) is DH2580.

Cat. No.	Rating	Weight (kg)
DH2581	3P30A300V with ground	0.5
DH2580	3P60A300V with ground	0.5

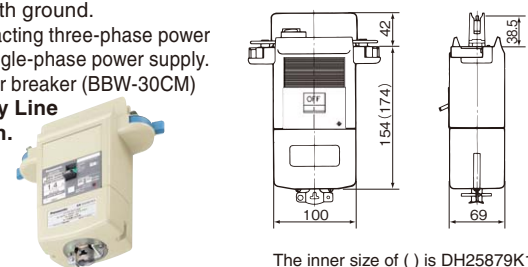
### Terminal plug with motor breaker (cream-gray finish)

3P 200V with ground.

Use for extracting three-phase power supply or single-phase power supply.

Built-in motor breaker (BBW-30CM)

**For Factory Line 200 system.**



The inner size of ( ) is DH25879K1.

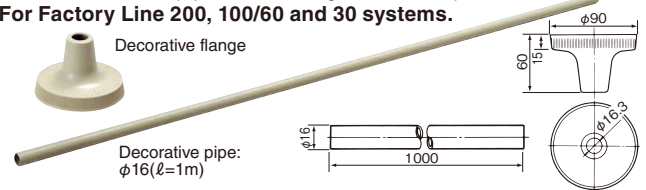
Cat. No.	Motor rating	Rating	Weight (kg)
DH25871K1	0.2kW	3P200V with ground	1.35
DH25872K1	0.4kW		
DH25873K1	0.75kW		
DH25874K1	1.0kW		
DH25875K1	1.5kW		
DH25876K1	2.2kW		
DH25877K1	3.7kW		
DH25878K1	5.5kW		
DH25879K1	7.5kW		

### Decorative flange and pipe (cream-gray finish)

Hide the suspension bolt for good appearance.

Cut the decorative pipe into the length of the suspension bolt.

**For Factory Line 200, 100/60 and 30 systems.**



Cat. No.	Rating	Weight (kg)
DH2455	Decorative flange	0.1
DH2456	Decorative pipe (ℓ = 1m)	0.47

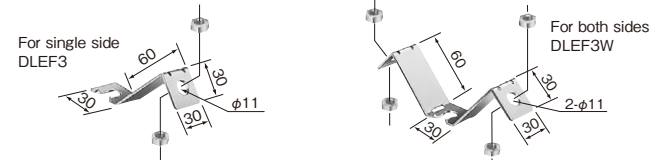
### Anti-swing fixture (electro-galvanized)

Eliminates need to pass through hanger bolt before processing.

Can be fitted to existing bolts to prevent swinging.

Default angle is 45 degrees. You can bend to fit the site.

**For Factory Line 200, 100/60 and 30 systems.**



Cat. No.	Type	Bolt	Weight (kg)
DLEF3	For single side	W3/8	0.07
DLEF3W	For both sides	W3/8	0.13

### Terminal plug with breaker (cream-gray finish)

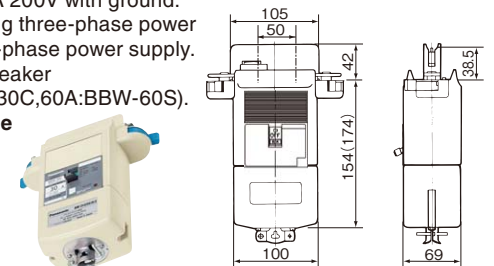
3P 20A/30A/60A 200V with ground.

Use for extracting three-phase power supply or single-phase power supply.

Built-in circuit breaker

(20A/30A:BBW-30C, 60A:BBW-60S).

**For Factory Line 200 system.**



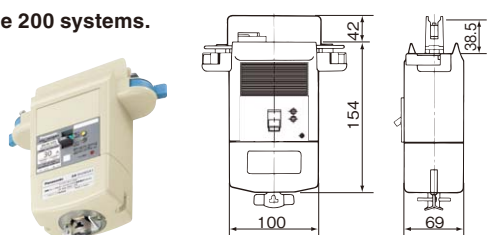
Cat. No.	Rating	Weight (kg)
DH2582K2	3P20A200V with ground	1.35
DH2583K2	3P30A200V with ground	
DH2586K2	3P60A200V with ground	

### Terminal plug with leakage breaker (cream-gray finish)

3P 20A 200V with ground. 3P 30A 200V with ground.

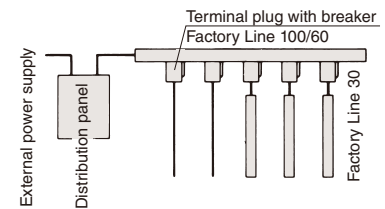
Use for extracting three-phase power supply or single-phase power supply. Built-in leakage breaker(BKW-50S). Available in 2 types with different current sensitivities and therein a further 2 types each with different ratings.

**For Factory Line 200 systems.**



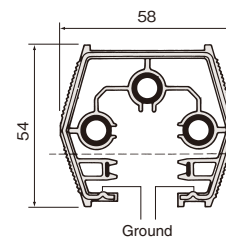
Cat. No.	Rating	Current sensitivity	Weight (kg)
DH25821K1	3P20A200V with ground	15mA	1.35
DH25831K1	3P30A200V with ground		
DH25822K1	3P20A200V with ground		
DH25832K1	3P30A200V with ground	30mA	

# FactoryLine 100/60



## The Factory Line 100 and Factory Line 60 are multipurpose ducts capable of simultaneously providing both three-phase and single-phase power supplies.

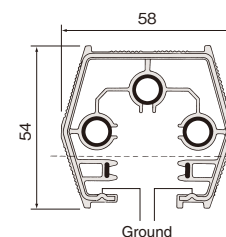
In the Factory Line 100/60 ducts, two types of conductors are separated into an upper level and a lower level, so two types of power supplies can be simultaneously obtained from the same duct. In addition to direct branching to a drive load, the upper level (Factory Line 100: either three-phase 100A or single-phase three-wire 100A; Factory Line 60: either three-phase 60A or single-phase three-wire 60A) can also be used as the main line for the connection of the Factory Line 30 in order to provide such branching circuits as small drive loads, electrical outlets, and lighting. In addition, a single-phase power supply of up to 20A 250V (same for both the Factory Line 100 and the Factory Line 60) can be obtained from the lower level in order to supply power for small drive loads, electrical outlets, lighting, etc. A wide variety of branching plugs are available for both the upper level and the lower level.



### Factory Line 100

3P 100A 300V with ground for direct branching to drive-loads or for branching to Factory Line 30.

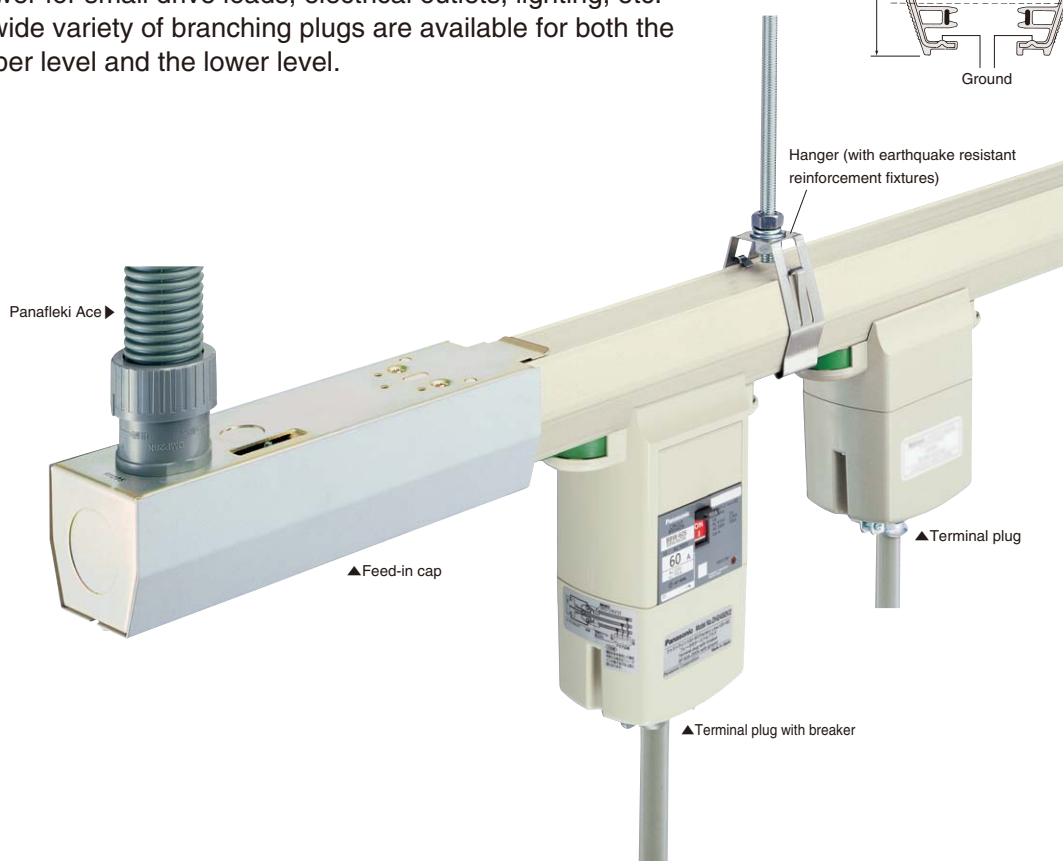
2P 20A 300V with ground for obtaining power supply for small drive-loads, electrical outlets, and lighting.



### Factory Line 60

3P 60A 300V with ground for direct branching to drive-loads or for branching to Factory Line 30.

2P 20A 300V with ground for obtaining power supply for small drive-loads, electrical outlets, and lighting.

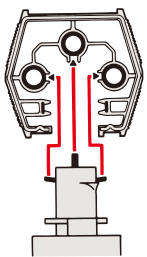




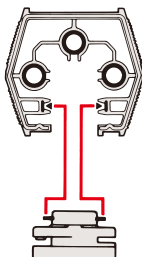


### ■ Method for branching from the three-wire of the upper level to Factory Line 30 [Items in parentheses are for Factory Line 60.]

#### ● Branching from the upper level

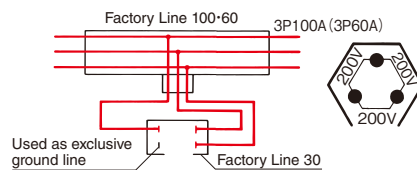


#### ● Branching from the lower level

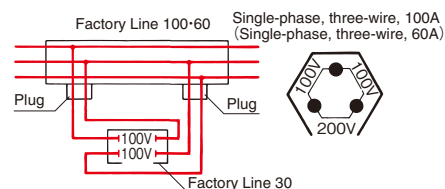


\* The plugs for the Factory Line 30 cannot be used with the Factory Line 100 or Factory Line 60 because the ground connections are different.

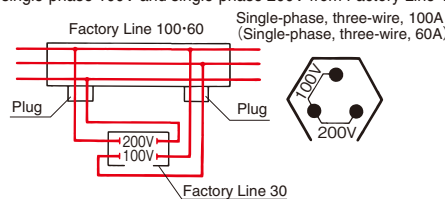
- To obtain a single three-phase circuit from Factory Line 100/60:



- To obtain two single-phase 100V circuits from Factory Line 100/60:



- To obtain single-phase 100V and single-phase 200V from Factory Line 100/60:

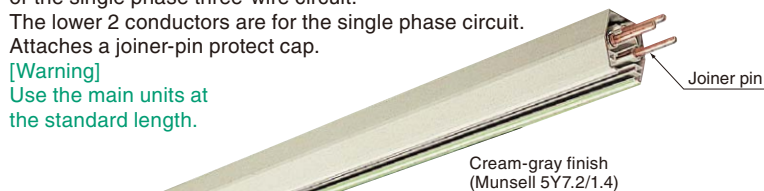


## Factory Line 100/60 main unit (cream-gray finish)

Factory Line 100: 3P 100A 300V + 2P 20A 300V with ground.  
 Factory Line 60: 3P 60A 300V + 2P 20A 300V with ground.  
 Conductor equipped duct.  
 The upper 3 conductors are for the three-phase three-wire circuit or the single phase three-wire circuit.  
 The lower 2 conductors are for the single phase circuit.  
 Attaches a joiner-pin protect cap.

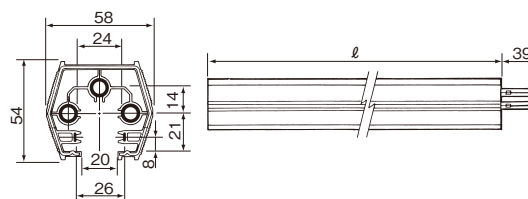
[Warning]

Use the main units at the standard length.

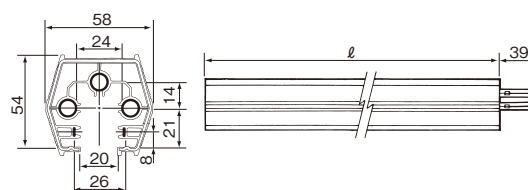


	Cat. No.	Length $\ell$ (mm)	Weight (kg)
Factory Line 100	DH2411	1,000	3.3
	DH2412	2,000	6.6
	DH2413	3,000	9.9
Factory Line 60	DH2311	1,000	3.1
	DH2312	2,000	6.1
	DH2313	3,000	9.1

### ● Factory Line 100



### ● Factory Line 60



## Duct cover (cream-gray finish)

Protect from entering foreign bodies or dusts into main unit.  
 Length 1000mm. Made of PVC resin.

For Factory Line 200,100/60 and 30systems.



Cat. No.	Weight (kg)
DH2799	0.06

## Factory Line 60 auxiliary main unit (cream-gray finish)

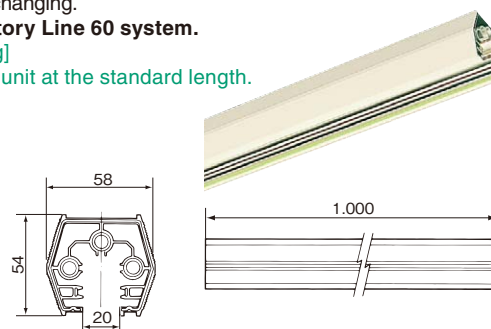
3P 60A 300V + 2P 20A 300V with ground.

Feed-in caps can only set at the female end of the Factory Line 60 main unit. In case supplying power at the male end, use this unit for gender changing.

For Factory Line 60 system.

[Warning]

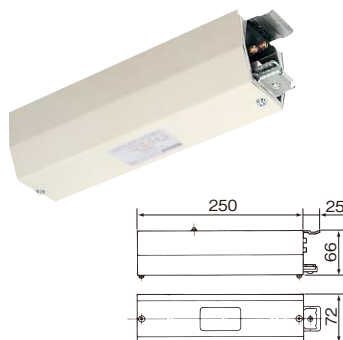
Use this unit at the standard length.



Cat. No.	Weight (kg)
DH2310	3.0

## Feed-in cap (cream-gray finish)

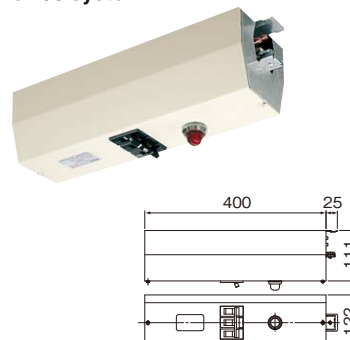
3P 100A 300V + 2P 20A 300V with ground.  
 Supplying power at an end of the main unit.  
 For Factory Line 100/60 system.



Cat. No.	Weight (kg)
DH2421	1.1

## Feed-in cap with breaker (cream-gray finish)

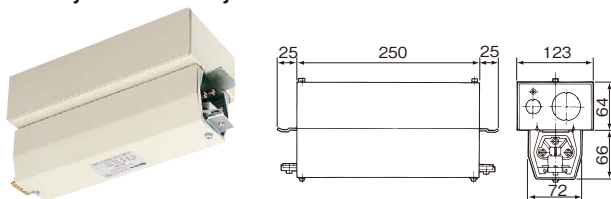
3P 100A 200V + 2P 20A 300V with ground.  
 Supplying power at an end of the main unit.  
 Built-in circuit breaker(3P 100A N-BAK-100)  
 For Factory Line 100 system.



Cat. No.	Weight (kg)
DH2424K1	3.1

### Center feed-in joiner (cream-gray finish)

3P 100A 300V + 2P 20A 300V with ground.  
Supplying power between the main units and connecting them.  
**For Factory Line 100/60 system.**



Knockout diameter

Side surface  
φ38.8×1 φ21.5×1

With 38mm pressure terminals

Cat. No.	Weight (kg)
DH2422	2.4

### Joiner L (cream-gray finish)

3P 100A 300V + 2P 20A 300V with ground.  
Connecting main unit to L-shapes.  
With feed-in terminal.

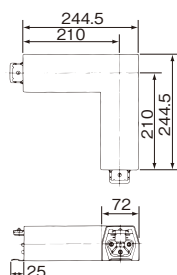
**For Factory Line 100/60 systems.**

[Caution]

- ① For Factory Line 100 systems, cut the feed line side unit to 40 mm for connection.
- ② For Factory Line 60 systems, auxiliary unit required on the feed in side.



Note : Custom-made products.



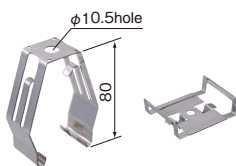
### Hanger (with earthquake resistant reinforcement fixtures)

Attaching main unit directly to the building structure or suspending with supplied bolts.  
Support intervals : Shorter than 1.5m.  
Stainless steel hanger.

**For Factory Line 200, 100/60 systems.**

[Caution]

- ① Suspending weight must be below 196N(20kgf) on each hanger.
- ② Main unit cannot fasten directly to the building structure without using hangers.



The DH2452K (no earthquake resistant reinforcement fixtures) is also available.

Cat. No.	Weight (kg)
DH2452K1	0.03

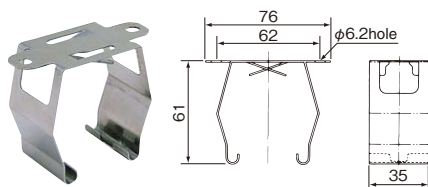
### Ceiling direct-mounting hanger

Mounting main unit directly to the ceiling.  
Support intervals : Shorter than 1.5m.  
Stainless steel hanger.

**For Factory Line 200, 100/60 systems.**

[Caution]

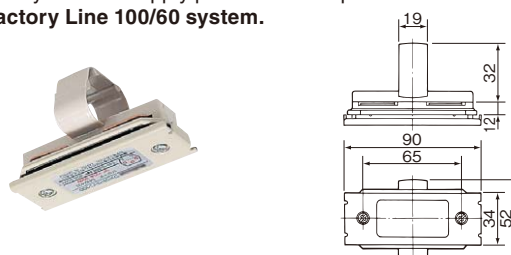
- ① Suspending weight must be below 196N(20kgf) on each hanger.
- ② Main unit cannot fasten directly to the building structure without using hangers.



Cat. No.	Weight (kg)
DH2453	0.03

### Joiner (cream-gray finish) (FS)

2P 20A 300V with ground.  
Connecting lower conductors and ground lines of main units electrically. Cannot supply power with this part.  
**For Factory Line 100/60 system.**

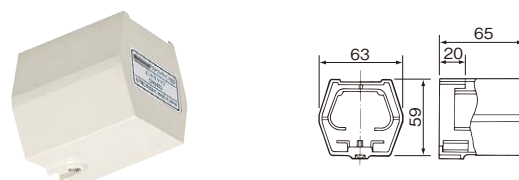


Cat. No.	Weight (kg)
DH2431	0.1

### End cap (cream-gray finish)

Closing an end of the main unit.

**For Factory Line 100/60 system.**



Cat. No.	Weight (kg)
DH2423K	0.06

### Earthquake resistant reinforcement fixtures

Used in hanger installations to further strengthen the main unit installation. Can be installed at any time to existing hanger installations. As a guide, we recommend installing it to hangers with a bolt length greater than 500 mm.  
Stainless steel hanger.

[Caution]

Cannot be used with ceiling direct-mounting hangers.

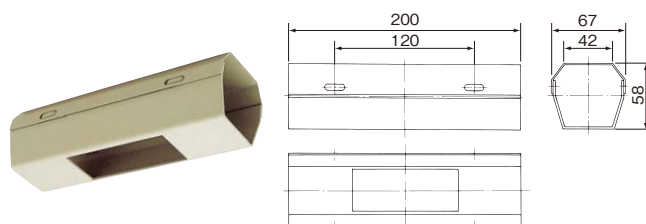


Cat. No.	Weight (kg)
DH2457	0.01

### Connection reinforcement fixture (cream-gray finish)

To keep straight the joint part of the main unit suspended by long bolts.

**For Factory Line 200, 100/60 systems.**



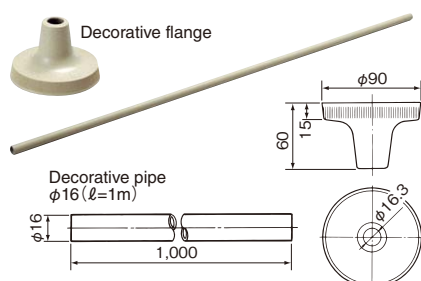
Cat. No.	Weight (kg)
DH2454	0.51



**Decorative flange and pipe (cream-gray finish)**

Hide the suspension bolt for good appearance. Cut the decorative pipe into the length of the suspension bolt.

**For Factory Line 200, 100/60 and 30 systems.**



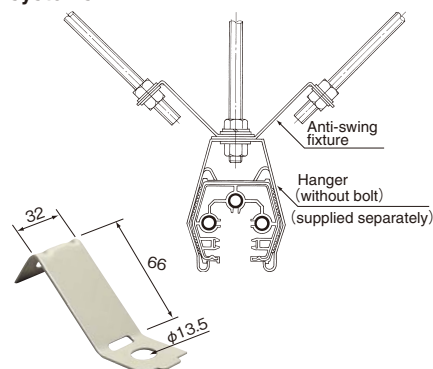
Cat. No.	Name	Weight (kg)
DH2455	Decorative flange	0.1
DH2456	Decorative pipe	0.47

**Anti-swing fixture (ivory-gray finish)**

Prevent suspension bolts from swinging. Default angle is 45 degrees. You can bend to fit the site.

Use two pieces if secure both sides.

**For Factory Line 400, 200, 100/60 and 30 systems.**



Cat. No.	Weight (kg)
DL741Y	0.1

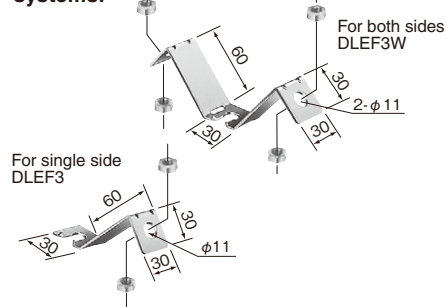
**Anti-swing fixture (electro-galvanized)**

Eliminates need to pass through hanger bolt before processing. Can be fitted to existing bolts to prevent swinging.

Default angle is 45 degrees.

You can bend to fit the site.

**For Factory Line 200, 100/60 and 30 systems.**



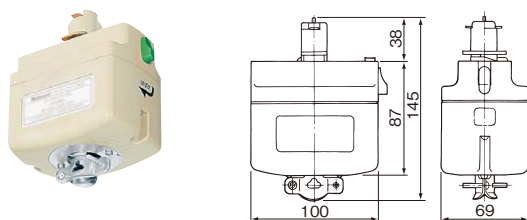
Cat. No.	Type	Bolt	Weight (kg)
DLEF3	For single side	W3/8	0.07
DLEF3W	For both sides	W3/8	0.13

**Terminal plug A (cream-gray finish)**

3P 30A 300V with ground.

Use for extracting three-phase power supply or single-phase power supply from the upper 3P conductors.

**For Factory Line 100/60 systems.**

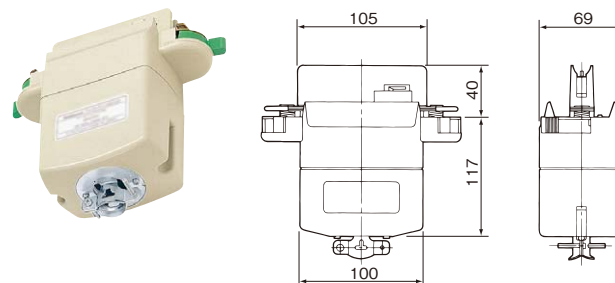


Cat. No.	Rating	Weight (kg)
DH2481	3P30A300V with ground	0.35

3P 60A 300V with ground.

Use for extracting three-phase power supply or single-phase power supply from the upper 3P conductors.

**For Factory Line 100/60 systems.**



Cat. No.	Rating	Weight (kg)
DH2491	3P60A300V with ground	0.5

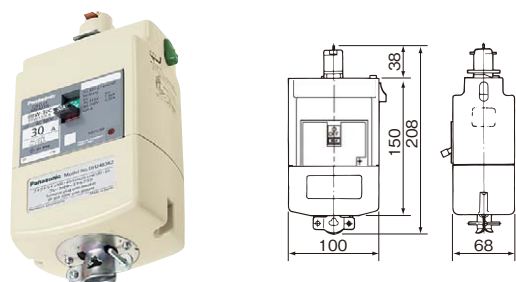
**Terminal plug with breaker (cream-gray finish)**

3P 20A/30A 200V with ground.

Use for extracting three-phase power supply or single-phase power supply from the upper 3P conductors.

Built-in circuit breaker(20A/30A:BBW-30C)

**For Factory Line 100/60 systems.**



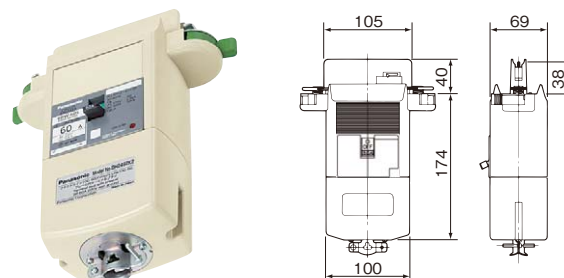
Cat. No.	Rating	Weight (kg)
DH2482K2	3P20A200V with ground	0.91
DH2483K2	3P30A200V with ground	

3P 60A 200V with ground.

Use for extracting three-phase power supply or single-phase power supply from the upper 3P conductors.

Built-in circuit breaker(60A:BBW-60S)

**For Factory Line 100/60 systems.**



Cat. No.	Rating	Weight (kg)
DH2492K2	3P60A200V with ground	1.4

### Terminal plug with breaker (cream-gray finish)

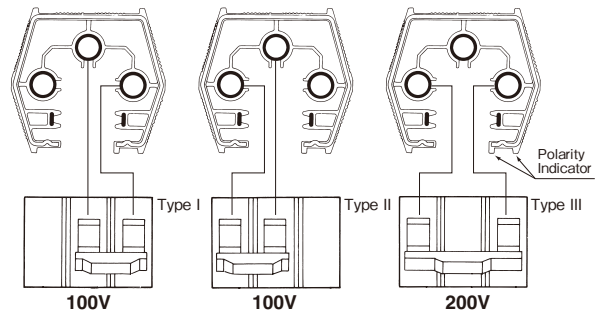
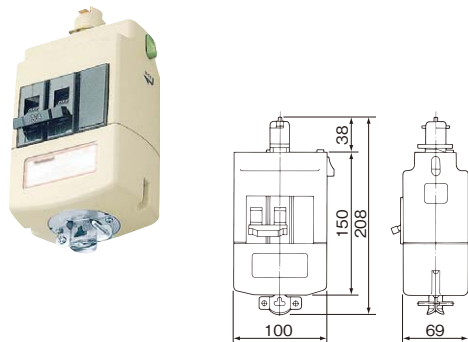
2P 20A/30A 200V with ground.

Use for extracting single-phase power supply from the upper 3P conductors.

Built-in circuit breaker(N-BAK-50K)

Available in 3 models, Type I, Type II and Type III.

**For Factory Line 100/60 systems.**



Consider the phase balance when selecting plugs.

Cat. No.	Rating	Type	Weight (kg)
DH24823K1	2P20A200V with ground	Type I	0.90
DH24824K1		Type II	
DH24825K1		Type III	
DH24833K1	2P30A200V with ground	Type I	0.90
DH24834K1		Type II	
DH24835K1		Type III	

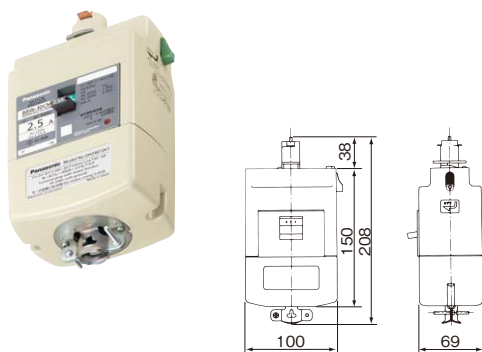
### Terminal plug with motor breaker (cream-gray finish)

For 0.2 kW to 5.5 kW.

Use for extracting three-phase power supply from the upper 3P conductors.

Built-in motor breaker (BBW-30CM)

**For Factory Line 100/60 systems.**



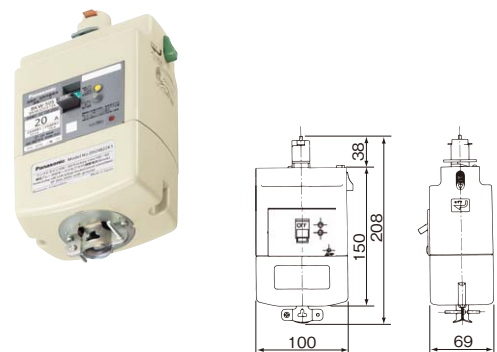
### Terminal plug with leakage breaker (cream-gray finish)

3P 20A/30A 200V with ground.

Use for extracting three-phase power supply or single-phase power supply from the upper 3P conductors.

Built-in leakage breaker (BKW-50S)

**For Factory Line 100/60 systems.**

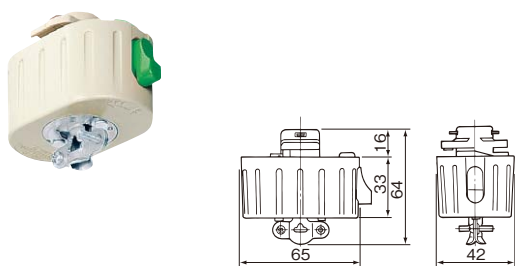


Cat. No.	Motor rating	Rating	Weight (kg)
DH24871K1	0.2kW	3P200V with ground	0.94
DH24872K1	0.4kW		
DH24873K1	0.75kW		
DH24874K1	1.0kW		
DH24875K1	1.5kW		
DH24876K1	2.2kW		
DH24877K1	3.7kW		
DH24878K1	5.5kW		

Cat. No.	Rating	Current sensitivity	Weight (kg)
DH24821K1	3P20A200V with ground	15mA	0.94
DH24831K1	3P30A200V with ground		
DH24822K1	3P20A200V with ground	30mA	
DH24832K1	3P30A200V with ground		

Terminal plug B (cream-gray finish)

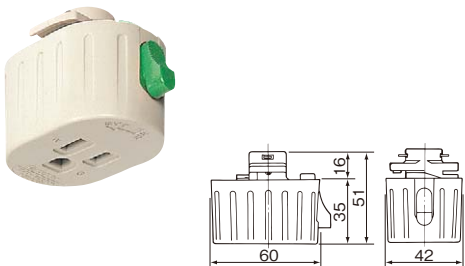
JIS C 8366 ⚡Ⓢ  
2P 15A 300V with ground.  
Use for extracting single-phase power supply from the lower 2P conductors.  
**For Factory Line 100/60 systems.**  
[Caution]  
Cannot be used for Factory Line 30 because of the difference in the ground connection.



Cat. No.	Rating	Weight (kg)
DH2463	2P15A300V with ground	0.08

Plug socket (cream-gray finish)

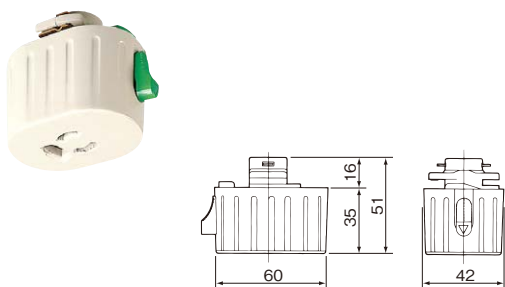
JIS C 8366 ⚡Ⓢ  
Ground 2P 15A 125V.  
Use for extracting single-phase power supply for socket from the lower 2P conductors. (100V only)  
**For Factory Line 100/60 systems.**  
[Caution]  
Cannot be used for Factory Line 30 because of the difference in the ground connection.



Cat. No.	Rating	Weight (kg)
DH2461	Ground 2P15A125V	0.07

Locking plug socket (cream-gray finish)

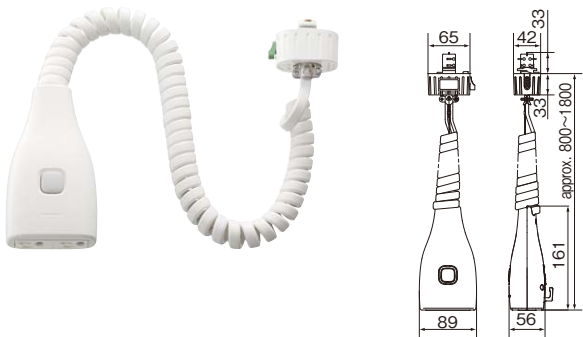
JIS C 8366 ⚡Ⓢ  
Ground 2P 15A 125V locking.  
Use for extracting single-phase power supply for socket from the lower 2P conductors. (100V only)  
**For Factory Line 100/60 systems.**  
[Caution]  
Cannot be used for Factory Line 30 because of the difference in the ground connection.



Cat. No.	Rating	Weight (kg)
DH2477	Ground 2P15A125V locking	0.07

Reel-type plug socket (white finish)

JIS C 8366 ⚡Ⓢ  
For twin ground 2P 15A 125V, twin ground 2P 15A 125V locking.  
Plug socket from lower 2P conductors, and can be lowered to hand level (max. 1.8m from the duct).  
Lowering up to 3m [U] from the duct available to order. (100V only)  
**For Factory Line 100/60 systems.**  
[Caution]  
① Cannot be used for Factory Line 30 because of the difference in the ground connection.  
② To rewind the reel section, press and hold the button, and slowly raise the socket. Failure to do so may cause damage.



Cat. No.	Rating	Weight (kg)
DH24621W	For twin ground 2P15A125V	0.70
DH24641W	For twin ground 2P15A125V locking	



Lighting fixture plug

JIS C 8366 ⚡Ⓜ

2P 6A 300V with ground.

Mounting a lighting fixture directly to the main unit and supply power from lower 2P conductors.

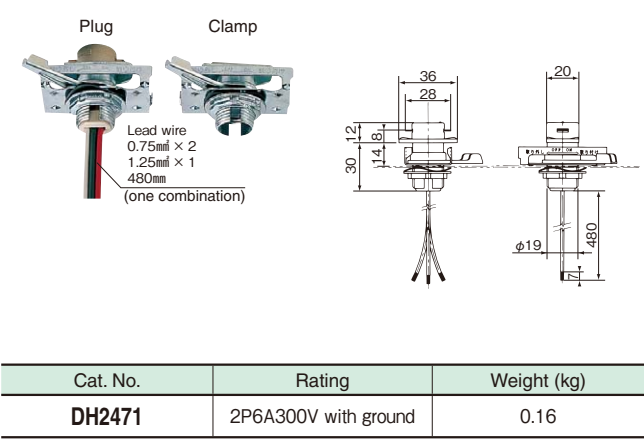
Consists of plug and clamp.

**For Factory Line 100/60 system.**

[Caution]

①Suspending weight must be below 196N(20kgf).

②Cannot be used for Factory Line 30 because of the difference in the ground connection.



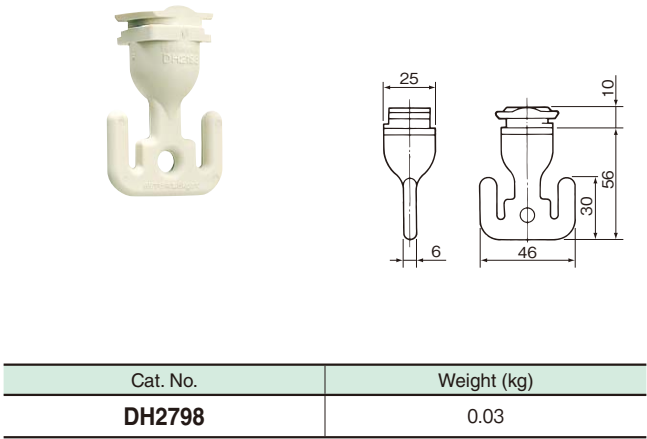
Cord hook (cream-gray finish)

Support wiring cables connected to the outlet plug.

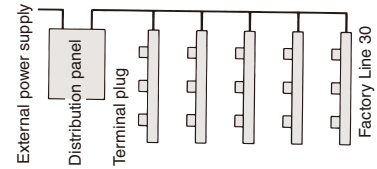
**For Factory Line 100/60 and 30 systems.**

[Caution]

Suspending weight must be below 49N(5kgf) on each hanger.

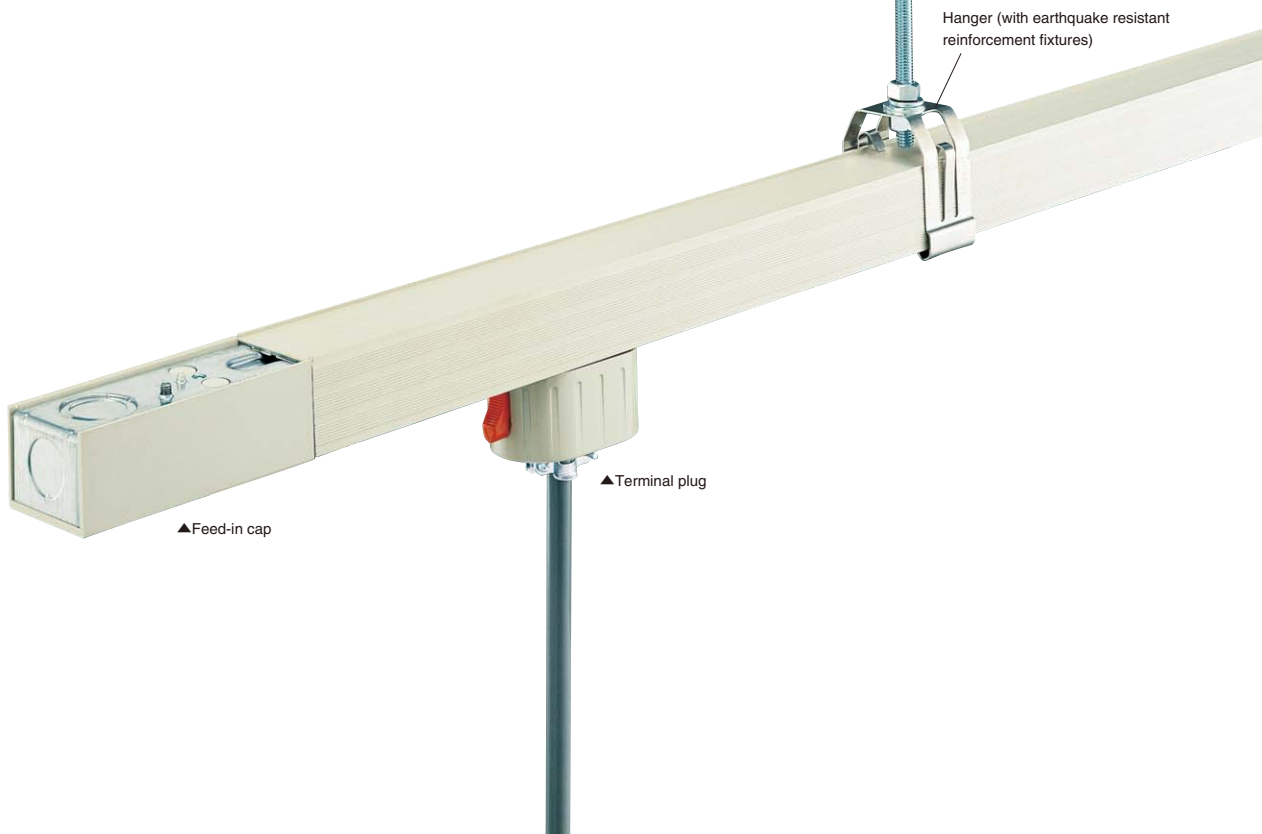
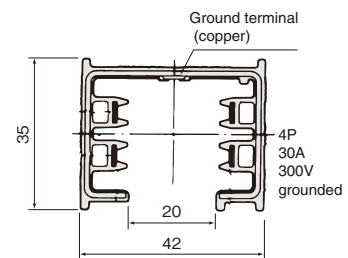


# FactoryLine 30



## The Factory Line 30 is a four-wire type duct capable of providing either one three-phase circuit or simultaneously two single-phase circuits.

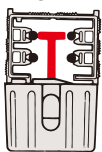
In the Factory Line 30 ducts, four conductors are separated into an upper level and a lower level. Thus, either one three-phase drive load circuit can be obtained, or the upper and lower levels of the same duct can be separated into two single-phase power supply circuits. In addition, by using the upper two wires for a single-phase 200V lighting power supply and the lower two wires for a single-phase 100V electrical outlet power supply, both the lighting and electrical outlet circuits for an assembly line can be obtained from a single duct.



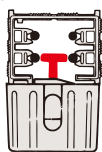


## ■ Standard power supply take-off

### ● Plug Socket (for 100V)

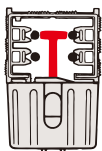


2PL type  
(for upper level)

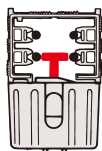


2PS type  
(for lower level)

### ● Terminal plug (for 100, 200V)



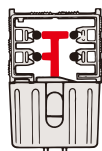
2PL type  
(for upper level)



2PS type  
(for lower level)

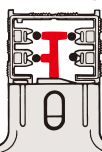
(Plugs for lights are the same.)

### ● Terminal plug (for three-phase 200V)



\* 3P type  
If a dedicated ground wire is required, use a 4P type plug and make one wire in the duct a dedicated ground circuit.

### ● Terminal plug with circuit protector



\* 3P type

[Caution]  
To prevent improper use of 100V or 200V power, be sure to affix a voltage indication labels to the Factory Line ducts & plugs after installation.  
The labels are included with products.

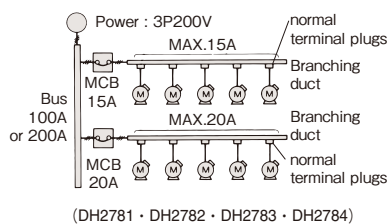
\* Do not use plugs for Factory Line 30 for Factory Line 400, 200, 100, 60, and 20 due to differences in the grounding methods and dimensions.

## ■ Using terminal plug

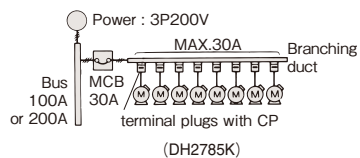
● Maximum you can use is 20A with main unit of Factory Line 30 when you use normal terminal plugs including DH2781.

● Maximum you can use is 30A when you use terminal plug(DH2785K) with circuit protection(CP). Because CP, which protects loads, allows more loads to connect to.

### ● When you use normal terminal plugs



### ● When you use terminal plugs with CP

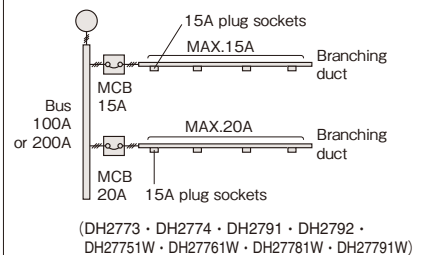


## ■ Using plug socket

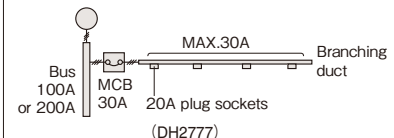
● Maximum you can use is 20A with main unit of Factory Line 30 when you use 15A plug sockets including DH2773.

● Maximum you can use is 30A when you use 20A plug sockets including DH2773. Because CP, which protects circuits, protects loads.

### ● When you use 15A plug sockets



### ● When you use 20A plug sockets

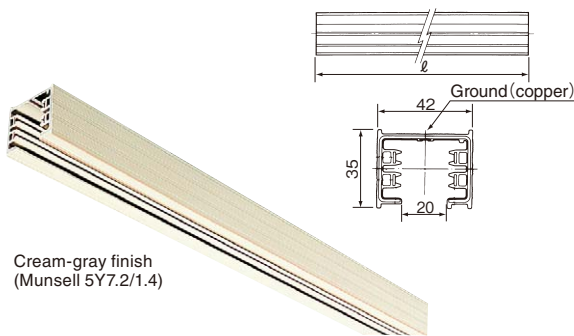




Factory Line 30 main unit (cream-gray finish) <sup>PS</sup>

4P 30A 300V with ground.  
Conductor equipped duct for a three-phase three-wire circuit or a single-phase three-wire circuit or two single phase circuit.

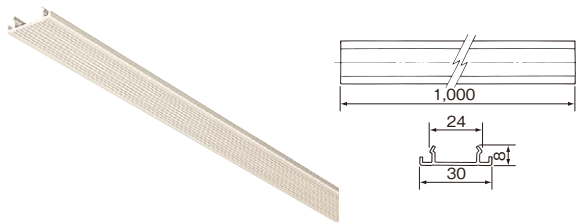
[Caution]  
The main unit cannot be attached directly to the building structure.



Cat. No.	Length $\ell$ (mm)	Weight (kg)
DH2711	1,000	1.6
DH2712	2,000	3.2
DH2713	3,000	4.8

Duct cover (cream-gray finish)

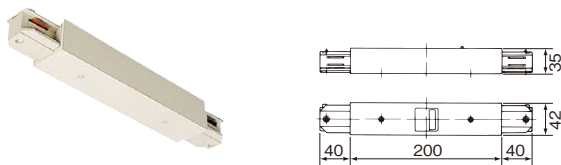
Protect from entering foreign bodies or dusts into main unit.  
Length 1000mm. Made of PVC resin.  
For Factory Line 200, 100/60 and 30 systems.



Cat. No.	Weight (kg)
DH2799	0.06

Center feed-in joiner (cream-gray finish) <sup>PS</sup>

4P 30A 300V with ground.  
Supplying power between the main units and connecting them.  
[Caution]  
Use same cables as a power line to connect terminals.



Cat. No.	Weight (kg)
DH2722	0.24

Feed-in cap (cream-gray finish) <sup>PS</sup>

4P 30A 300V with ground.  
Supplying power at an end of the main unit.



Cat. No.	Weight (kg)
DH2721	0.16

Joiner (cream-gray finish) <sup>PS</sup>

4P 30A 300V with ground.  
Connecting main units both physically and electrically.  
Cannot supply power with this part.



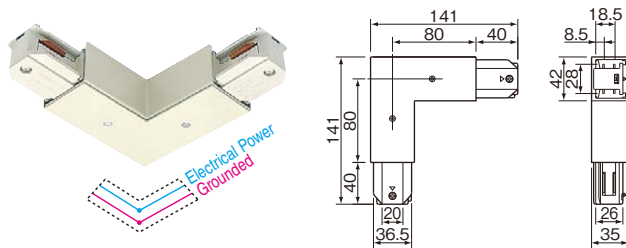
Cat. No.	Weight (kg)
DH2731	0.08

**L joiners (cream-gray finish)** 

4P 30A 300V with ground.  
Connecting main unit to L-shapes.  
With feed-in terminal.

[Caution]

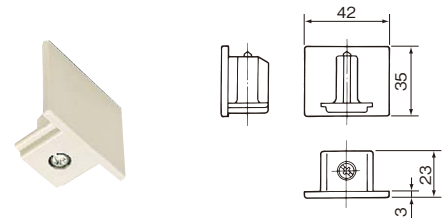
You cannot use joiners to layout cranks.



Cat. No.	Weight (kg)
<b>DH2732</b>	0.37

**End cap (cream-gray finish)** 

Closing an end of the main unit.



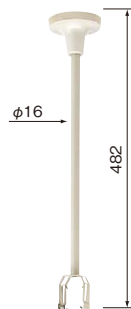
Cat. No.	Weight (kg)
DH2723	0.01

### Pipe suspension hanger (cream-gray finish)

Suspending main unit.  
The pipe can be cut at the flange side.  
Support intervals : Shorter than 1.5m.

[Caution]

Suspending weight must be below 98N(10kgf) on each hanger.



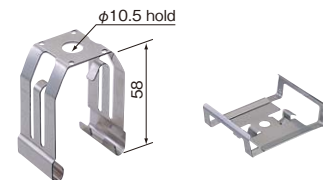
Cat. No.	Weight (kg)
<b>DH2750</b>	0.31

**Hanger (with earthquake resistant reinforcement fixtures)**

Attaching main unit directly to the building structure or suspending with supplied bolts. Support intervals : Shorter than 1.5m.  
Stainless steel hanger

[Caution]

- ① Suspending weight must be below 98N(10kgf) on each hanger.
- ② Main unit cannot fasten directly to the building structure without using hangers.
- ③ When using long hanger bolts, also install hanger bolt anti-swing fixtures.



The DH2752 (no earthquake resistant reinforcement fixtures) is also available.

Cat. No.	Weight (kg)
DH2752K1	0.03

## Earthquake resistant reinforcement fixtures

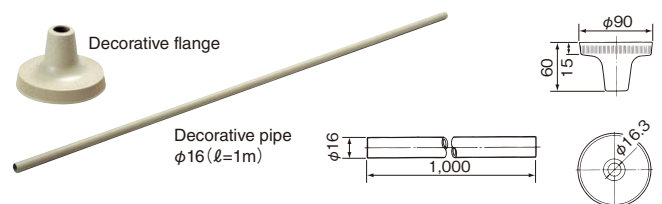
Used in hanger installations to further strengthen the main unit installation. Can be installed at any time to existing hanger installations. As a guide, we recommend installing it to hangers with a bolt length greater than 500mm. Stainless steel hanger.



Cat. No.	Weight (kg)
DH2757	0.01

**Decorative flange and pipe (cream-gray finish)**

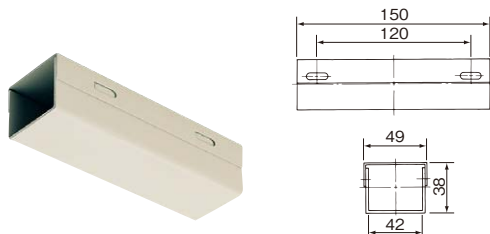
Hide the suspension bolt for good appearance.  
Cut the decorative pipe into the length of the suspension bolt.  
**For Factory Line 200, 100/60 and 30 systems.**



Cat. No.	Name	Weight (kg)
<b>DH2455</b>	Decorative flange	0.1
<b>DH2456</b>	Decorative pipe	0.47

**Connection reinforcement fixture (cream-gray finish)**

To keep straight the joint part of the main unit suspended by long bolts.



Cat. No.	Weight (kg)
<b>DH2754</b>	0.36

**Anti-swing fixture (ivory-gray finish)**

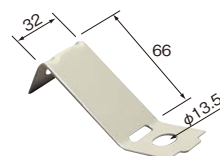
Prevent suspension bolts from swinging.

Default angle is 45 degrees.

You can bend to fit the site.

Use two pieces if secure both sides.

**For Factory Line 400, 200, 100/60 and 30 systems.**



Cat. No.	Weight (kg)
<b>DL741Y</b>	0.1

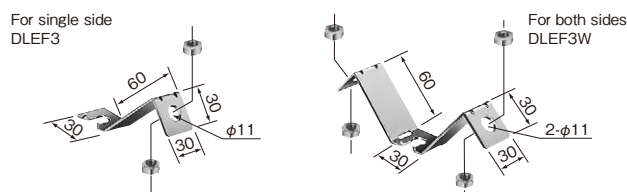
**Anti-swing fixture (electro-galvanized)**

Eliminates need to pass through hanger bolt before processing.

Can be fitted to existing bolts to prevent swinging.

Default angle is 45 degrees. You can bend to fit the site.

**For Factory Line 200, 100/60 and 30 systems.**



Cat. No.	Type	Bolt	Weight (kg)
<b>DLEF3</b>	For single side	W3/8	0.07
<b>DLEF3W</b>	For both sides	W3/8	0.13

**Terminal plug (cream-gray finish) <sup>(PS)</sup>**

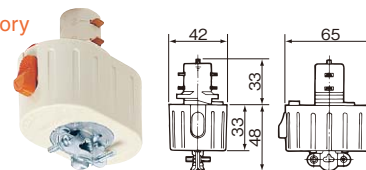
2P/3P/4P 15A 300V with ground.

Use for extracting three-phase power supply or single-phase power supply. "L"(for the upper 2P conductors) and "S"(for the lower 2P conductors) plug are available in 2P type.

**For Factory Line 30 system.**

[Caution]

Cannot be used with Factory Line 100/60 systems.



Cat. No.	Type	Rating	Weight (kg)
<b>DH2781</b>	2PS	2P15A300V with ground	0.08
<b>DH2782</b>	2PL	2P15A300V with ground	
<b>DH2783</b>	3P	3P15A300V with ground	0.08
<b>DH2784</b>	4P	4P15A300V with ground	

**Terminal plug with circuit protector (CP) (cream-gray finish) <sup>(PS)</sup>**

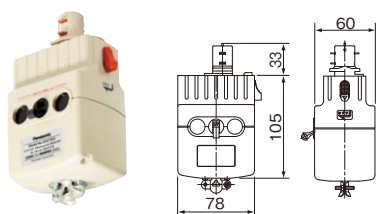
3P 15A 250V with ground.

Use for extracting three-phase power supply or single-phase power supply. Built-in circuit protector (CP-A)

**For Factory Line 30 system.**

[Caution]

Cannot be used with Factory Line 100/60 systems.



Cat. No.	Rating	Weight (kg)
<b>DH2785K</b>	3P15A250V with ground	0.35

**Plug socket (cream-gray finish) <sup>(PS)</sup>**

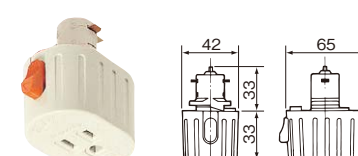
Ground 2P 15A 125V.

Use for extracting single-phase 100V socket power from 15A or 20A branched circuits. "L" (for the upper conductors) and "S" (for the lower conductors) plug are available.

**For Factory Line 30 systems.**

[Caution]

Cannot be used with Factory Line 100/60 systems.



Cat. No.	Type	Rating	Weight (kg)
<b>DH2773</b>	S	Ground 2P15A125V	0.05
<b>DH2774</b>	L		



**Locking plug socket (cream-gray finish) <sup>(PS)</sup>**

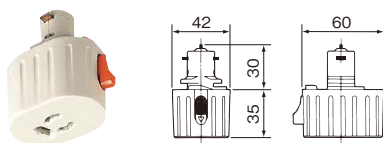
Ground 2P 15A 125V locking.

Use for extracting single-phase 100V socket power from 15A or 20A branched circuits. "L" (for the upper conductors) and "S" (for the lower conductors) plug are available.

**For Factory Line 30 system.**

**[Caution]**

Cannot be used with Factory Line 100/60 systems.



Cat. No.	Type	Rating	Weight (kg)
DH2791	S	Ground 2P15A125V locking	0.05
DH2792	L		

**Hooked plug socket (cream-gray finish) <sup>(PS)</sup>**

Ground 3P 20A 250V.

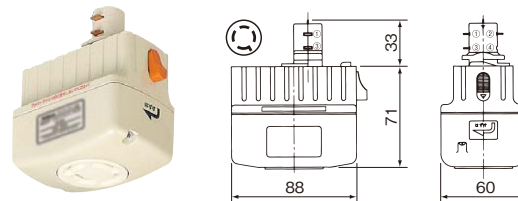
With ground 3P 20A hooked socket (WF2420WK)

Use for extracting single-phase 100V socket power from 15A or 20A branched circuits.

**For Factory Line 30 system.**

**[Caution]**

Cannot be used with Factory Line 100/60 systems.



The socket <sup>(U)</sup> shown in the figure below is also available to order.



Cat. No.	Rating	Weight (kg)
DH2777	Ground 3P20A250V	0.27

**Reel-type plug socket (white finish) <sup>(PS)</sup>**

For twin ground 2P 15A 125V, twin ground 2P 15A 125V locking.

Single-phase 100V socket power can be lowered to hand level (max. 1.8m from the duct) from a 15A or 20A branching circuit.

Lowering up to 3m <sup>(U)</sup> from the duct available to order.

"L" (for the upper conductors) and "S" (for the lower conductors) plug are available.

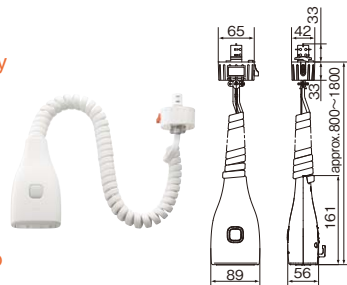
**For Factory Line 30 system.**

**[Caution]**

① Cannot be used with Factory Line 100/60 systems.

② To rewind the reel section, press and hold the button, and slowly raise the socket. Failure to do so may cause damage.

③ Use within the indicated load carrying capacity (up to 1500W).



Cat. No.	Type	Rating	Weight (kg)
DH27751W	S	For twin ground 2P15A125V	0.73
DH27761W	L		
DH27781W	S	For twin ground 2P15A125V locking	
DH27791W	L		

**Lighting fixture plug <sup>(PS)</sup>**

2P 6A 300V with ground.

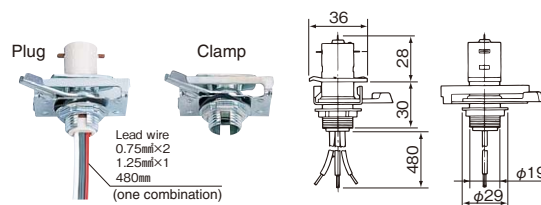
Mounting a lighting fixture directly to the main unit and supply power from upper or lower 2P conductors. Consists of plug and clamp.

**For Factory Line 30 system.**

**[Caution]**

① Suspending weight must be below 196N(20kgf).

② Cannot be used with Factory Line 100/60 systems.



Cat. No.	Type	Rating	Weight (kg)
DH2771	S	2P6A300V with ground	0.05
DH2772	L		

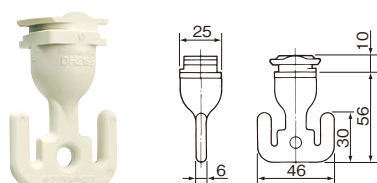
**Cord hook (cream-gray finish)**

Support wiring cables connected to the outlet plug.

**For Factory Line 100/60 and 30 systems.**

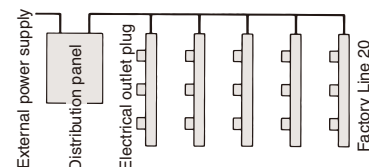
**[Caution]**

Suspending weight must be below 49N (5kgf) on each hanger.



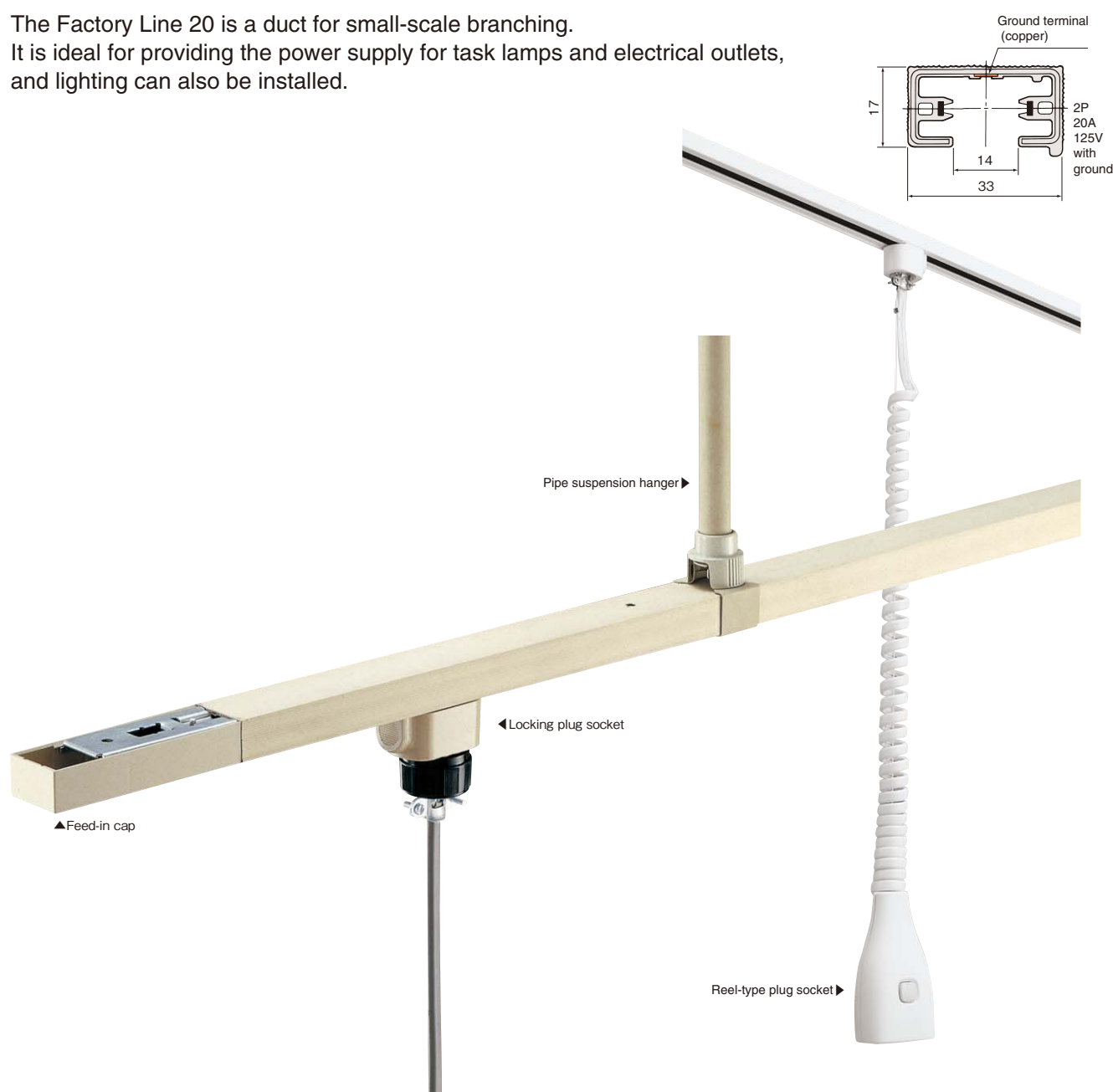
Cat. No.	Weight (kg)
DH2798	0.03

# FactoryLine 20



## The Factory Line 20 is a duct for small-scale branching capable of providing one single-phase power supply circuit.

The Factory Line 20 is a duct for small-scale branching. It is ideal for providing the power supply for task lamps and electrical outlets, and lighting can also be installed.

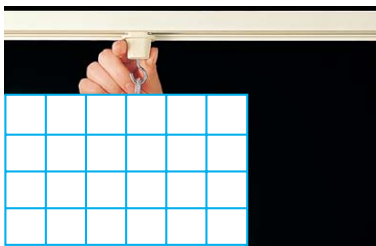




■ For the display of work standards sheets, process charts, parts lists, self-guided tour route indications, etc.



●Poster clip

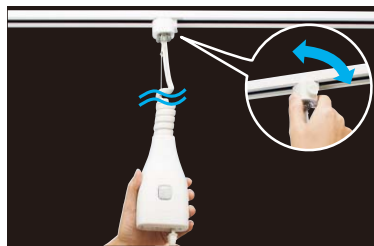


●Hanging hook

■ A power supply for measuring instruments, electric tools, and similar devices



●Locking plug socket



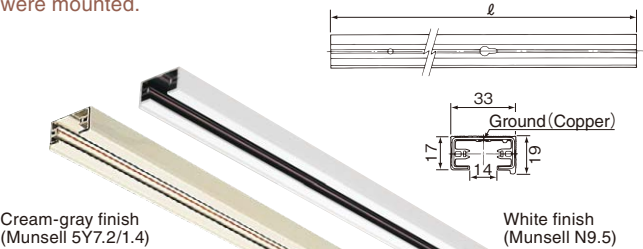
●Reel-type plug socket

■ For installing lighting fittings  
You can also install Panasonic LED light bar.  
The look is simple & sophisticated.



Factory Line 20 main unit

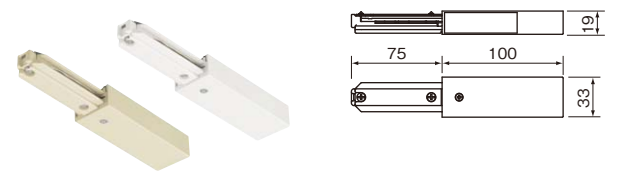
JIS C 8366 ⚡ Ⓢ  
2P 20A 125V with ground.  
Conductor equipped duct for a single-phase circuit.  
[Caution]  
Do not attach the plug unit with the place where the tapping screw were mounted.



Cat. No.	Color	Length $\ell$ (mm)	Weight (kg)
DH2611	Cream gray	1,000	0.79
DH2612		2,000	1.58
DH2613		3,000	2.37
DH2611W	White	1,000	0.79
DH2612W		2,000	1.58
DH2613W		3,000	2.37

Feed-in cap

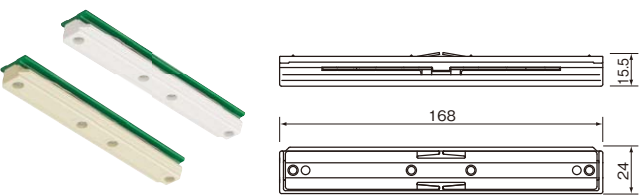
JIS C 8366 ⚡ Ⓢ  
2P 20A 125V with ground.  
Supplying power at an end of the main unit.  
Internal quick connect terminals for single core wire.



Cat. No.	Color	Weight (kg)
DH2621K1	Cream gray	0.11
DH2621K1W	White	0.11

Joiner

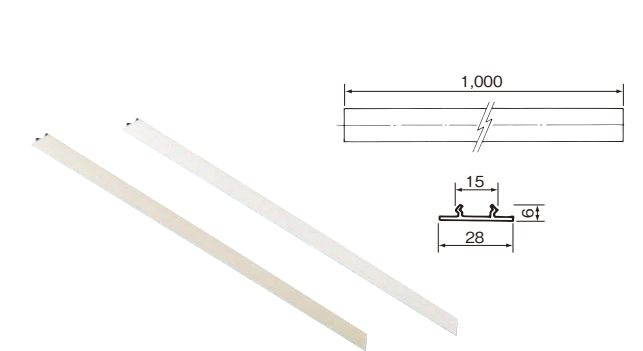
JIS C 8366 ⚡ Ⓢ  
2P 20A 125V with ground.  
Connecting main units both physically and electrically.  
Cannot supply power with this part.



Cat. No.	Color	Weight (kg)
DH2631K1	Cream gray	0.1
DH2631K1W	White	0.1

Duct cover

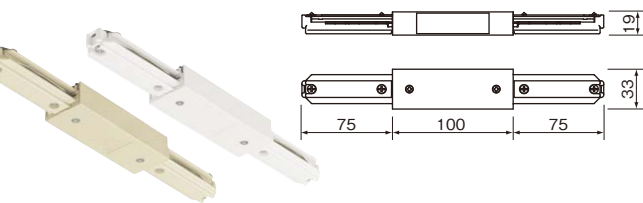
Protect from entering foreign bodies or dusts into main unit.  
Length 1000mm. Made of PVC.



Cat. No.	Color	Weight (kg)
DH2699	Cream gray	0.08
DH2699W	White	0.08

Center feed-in joiner

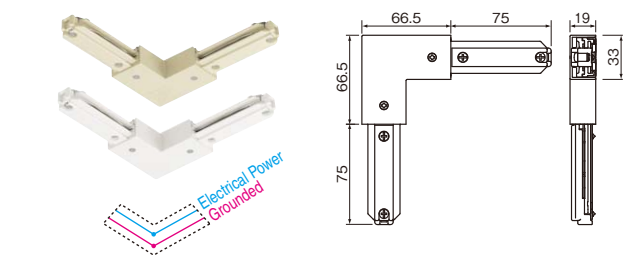
JIS C 8366 ⚡ Ⓢ  
2P 20A 125V with ground.  
Supplying power between the main units and connecting them.  
Internal quick connect terminals for single core wire.



Cat. No.	Color	Weight (kg)
DH2622K1	Cream gray	0.19
DH2622K1W	White	0.19

L joiners (with feed-in terminal)

JIS C 8366 ⚡ Ⓢ  
2P 20A 125V with ground.  
Connecting main unit to L-shapes. With feed-in terminal.  
[Caution]  
You cannot use joiners to layout cranks.



Cat. No.	Color	Weight (kg)
DH2632K1	Cream gray	0.19
DH2632K1W	White	0.19



### End cap

JIS C 8366 ⚡ Ⓟ

Closing an end of the main unit.



Cat. No.	Color	Weight (kg)
<b>DH2623</b>	Cream gray	0.006
<b>DH2623W</b>	White	0.006

### Hanger (without bolt)

Suspending main unit directly from the building structure, or when the hanger bolts ( $\ell=200$ ) are insufficient.

Stainless steel hanger.

[Caution]

Suspending weight must be below 98N(10kgf) on each hanger.



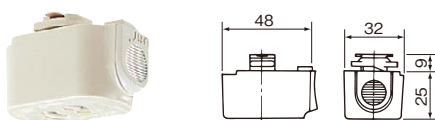
Cat. No.	Color	Weight (kg)
<b>DH2652</b>	Cream gray	0.03
<b>DH2652W</b>	White	0.03

### Locking plug socket (cream-gray finish)

JIS C 8366 ⚡ Ⓟ

2P 15A 125V.

Use for extracting single-phase 100V socket power.



Cat. No.	Rating	Weight (kg)
<b>DH2671</b>	2P15A125V	0.04

### Pipe suspension hanger

Suspending main unit.

The pipe can be cut at the flange side.

Support intervals : Shorter than 1.5m.

[Caution]

Suspending weight must be below 98N(10kgf) on each hanger.



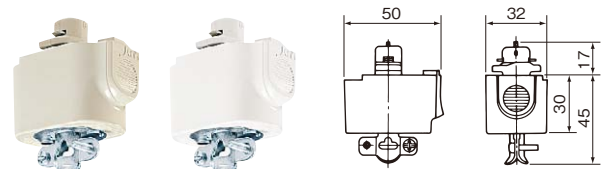
Cat. No.	Color	Weight (kg)
<b>DH2650</b>	Cream gray	0.31
<b>DH2650W</b>	White	0.31

### Terminal plug (with ground)

JIS C 8366 ⚡ Ⓟ

2P 15A 125V with ground.

Use for extracting single-phase power supply.



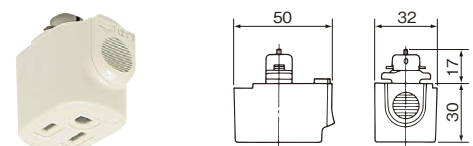
Cat. No.	Color	Rating	Weight (kg)
<b>DH2683</b>	Cream gray	2P15A125V with ground	0.05
<b>DH2683W</b>	White	2P15A125V with ground	0.05

### Plug socket (with ground) (cream-gray finish)

JIS C 8366 ⚡ Ⓟ

Ground 2P 15A 125V.

Use for extracting single-phase 100V socket power.



Cat. No.	Rating	Weight (kg)
<b>DH2670</b>	Ground 2P15A125V	0.04

### Locking plug socket (with ground)

JIS C 8366 ⚡Ⓢ

Ground 2P 15A 125V locking.

Use for extracting single-phase 100V socket power.



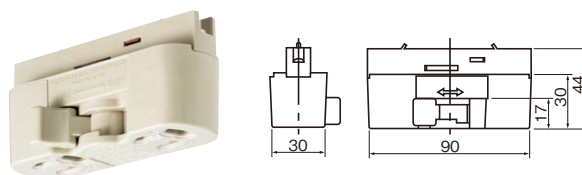
Cat. No.	Color	Rating	Weight (kg)
<b>DH2684</b>	Cream gray	Ground 2P15A125V locking	0.04
<b>DH2684W</b>	White	Ground 2P15A125V locking	0.04

### Lock-type duplex outlet plugs (with ground) (cream-gray finish)

JIS C 8366 ⚡Ⓢ

Twin ground 2P 15A 125V locking.

Use for extract single-phase 100V socket power.



Cat. No.	Rating	Weight (kg)
<b>DH2686</b>	For twin ground 2P15A125V locking	0.1

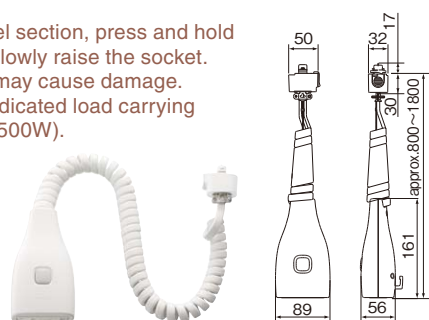
### Reel-type plug socket (with ground)(white finish)

JIS C 8366 ⚡Ⓢ

For twin ground 2P 15A 125V, twin ground 2P 15A 125V locking.  
Single-phase 100V socket power can be lowered to hand level  
(max. 1.8m from the duct). Lowering up to 3m □ from the duct  
available to order.

[Caution]

- ① To rewind the reel section, press and hold the button, and slowly raise the socket. Failure to do so may cause damage.
- ② Use within the indicated load carrying capacity (up to 1500W).



Cat. No.	Rating	Weight (kg)
<b>DH26751W</b>	For twin ground 2P15A125V	0.7
<b>DH26771W</b>	For twin ground 2P15A125V locking	

### Lighting fixture plug

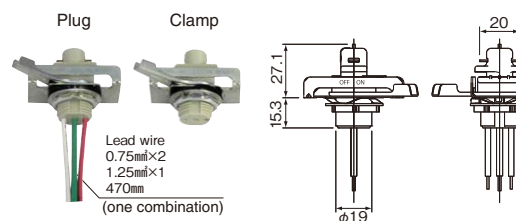
JIS C 8366 ⚡Ⓢ

2P 6A 125V with ground.

Mounting a lighting fixture directly to the main unit and supply power  
from upper or lower 2P conductors. Consists of plug and clamp.

[Caution]

Suspending weight must be below 98N(10kgf).



Cat. No.	Rating	Weight (kg)
<b>DH2673K</b>	2P6A125V with ground	0.09

### Hanging hook (cream-gray finish)

Hooking something on the main unit.

[Caution]

Suspending weight must be below 49N(5kgf) on each hanger.



Cat. No.	Weight (kg)
<b>DH2698</b>	0.01

### Poster clip (cream-gray finish)

Suspending document or sheet to the main unit.

[Caution]

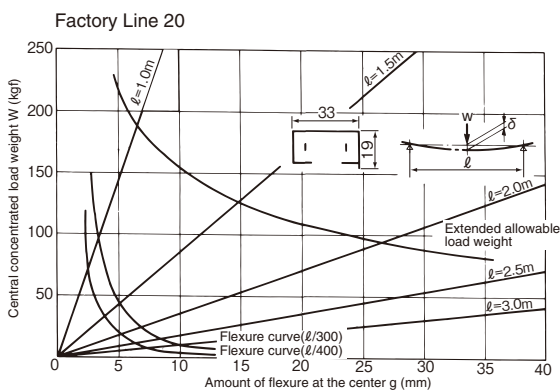
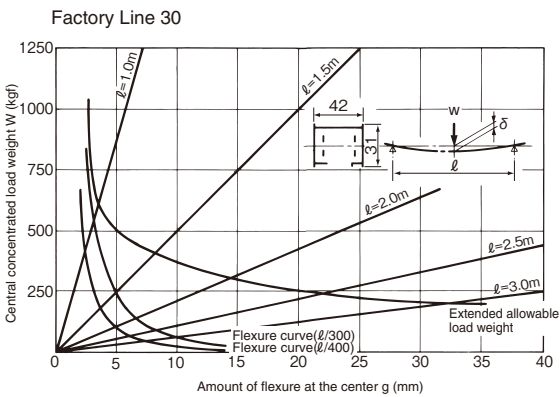
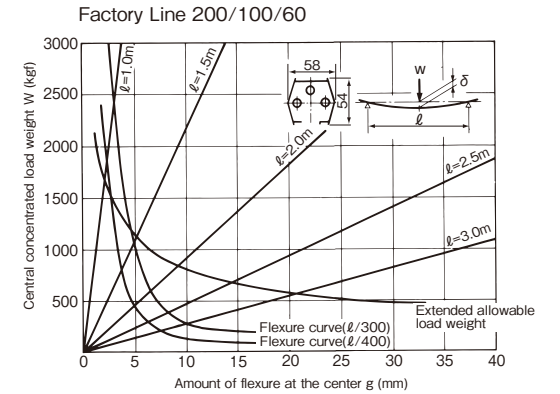
Suspending weight must be below 9.8N(1kgf) on each hanger.



Cat. No.	Weight (kg)
<b>DH2697</b>	0.2

# Quality Characteristics

## Load weight and amount of flexure



## Electrical characteristics and voltage drop

〈Factory Line 400〉

● 3P 400A 300V

Rated current (A)	Electrical system	Frequency (Hz)	Electrical characteristics ( $10^{-3}\Omega/m$ )			Voltage drop between wires (V/m)						
			AC resistance (R)	Reactance (X)	Impedance (Z)	$\cos\theta=1.0$	0.9	0.8	0.7	0.6	0.5	0.4
400	3 $\phi$ 3W	50	0.121	0.174	0.087	0.115	0.120	0.120	0.119	0.116	0.111	
		60	0.125	0.145	0.198	0.087	0.122	0.130	0.132	0.132	0.130	0.127

〈Factory Line 200〉

● 3P 200A 300V

Rated current (A)	Electrical system	Frequency (Hz)	Electrical characteristics ( $10^{-3}\Omega/m$ )			Voltage drop between wires (V/m)						
			AC resistance (R)	Reactance (X)	Impedance (Z)	$\cos\theta=1.0$	0.9	0.8	0.7	0.6	0.5	0.4
200	1 $\phi$ 2W	50	0.242	0.101	0.262	0.097	0.105	0.102	0.097	0.090	0.083	0.076
		60		0.121	0.271	0.097	0.108	0.106	0.102	0.097	0.090	0.083
	1 $\phi$ 3W	50		0.098	0.260	0.084	0.090	0.087	0.083	0.077	0.071	0.065
		60		0.117	0.269	0.084	0.093	0.091	0.088	0.083	0.077	0.071
	3 $\phi$ 3W	50										
		60										

〈Factory Line 100〉

● 3P 100A 300V

Rated current (A)	Electrical system	Frequency (Hz)	Electrical characteristics ( $10^{-3}\Omega/m$ )			Voltage drop between wires (V/m)						
			AC resistance (R)	Reactance (X)	Impedance (Z)	$\cos\theta=1.0$	0.9	0.8	0.7	0.6	0.5	0.4
100	1 $\phi$ 2W	50	0.525	0.168	0.551	0.105	0.109	0.104	0.097	0.090	0.082	0.073
		60		0.201	0.562	0.105	0.112	0.108	0.102	0.095	0.087	0.079
	1 $\phi$ 3W	50		0.162	0.550	0.091	0.094	0.090	0.084	0.077	0.070	0.062
		60		0.194	0.560	0.091	0.096	0.093	0.088	0.081	0.075	0.067
	3 $\phi$ 3W	50										
		60										

● 2P 20A 300V

20	1 $\phi$ 2W	50	2.850	0.202	2.857	0.114	0.106	0.096	0.086	0.075	0.064	0.053
		60		0.243	2.860	0.114	0.107	0.097	0.087	0.076	0.065	0.055

〈Factory Line 60〉

● 3P 60A 300V

Rated current (A)	Electrical system	Frequency (Hz)	Electrical characteristics ( $10^{-3}\Omega/m$ )			Voltage drop between wires (V/m)						
			AC resistance (R)	Reactance (X)	Impedance (Z)	$\cos\theta=1.0$	0.9	0.8	0.7	0.6	0.5	0.4
60	1 $\phi$ 2W	50	1.017	0.168	1.031	0.122	0.119	0.110	0.100	0.090	0.079	0.067
		60		0.201	1.037	0.122	0.120	0.112	0.103	0.092	0.082	0.071
	1 $\phi$ 3W	50		0.162	1.030	0.106	0.102	0.095	0.086	0.077	0.067	0.058
		60		0.194	1.035	0.106	0.104	0.097	0.088	0.080	0.070	0.060
	3 $\phi$ 3W	50										
		60										

● 2P 20A 300V

20	1 $\phi$ 2W	50	2.850	0.202	2.857	0.114	0.106	0.096	0.086	0.075	0.064	0.053
		60		0.243	2.860	0.114	0.107	0.097	0.087	0.076	0.065	0.055

〈Factory Line 30〉

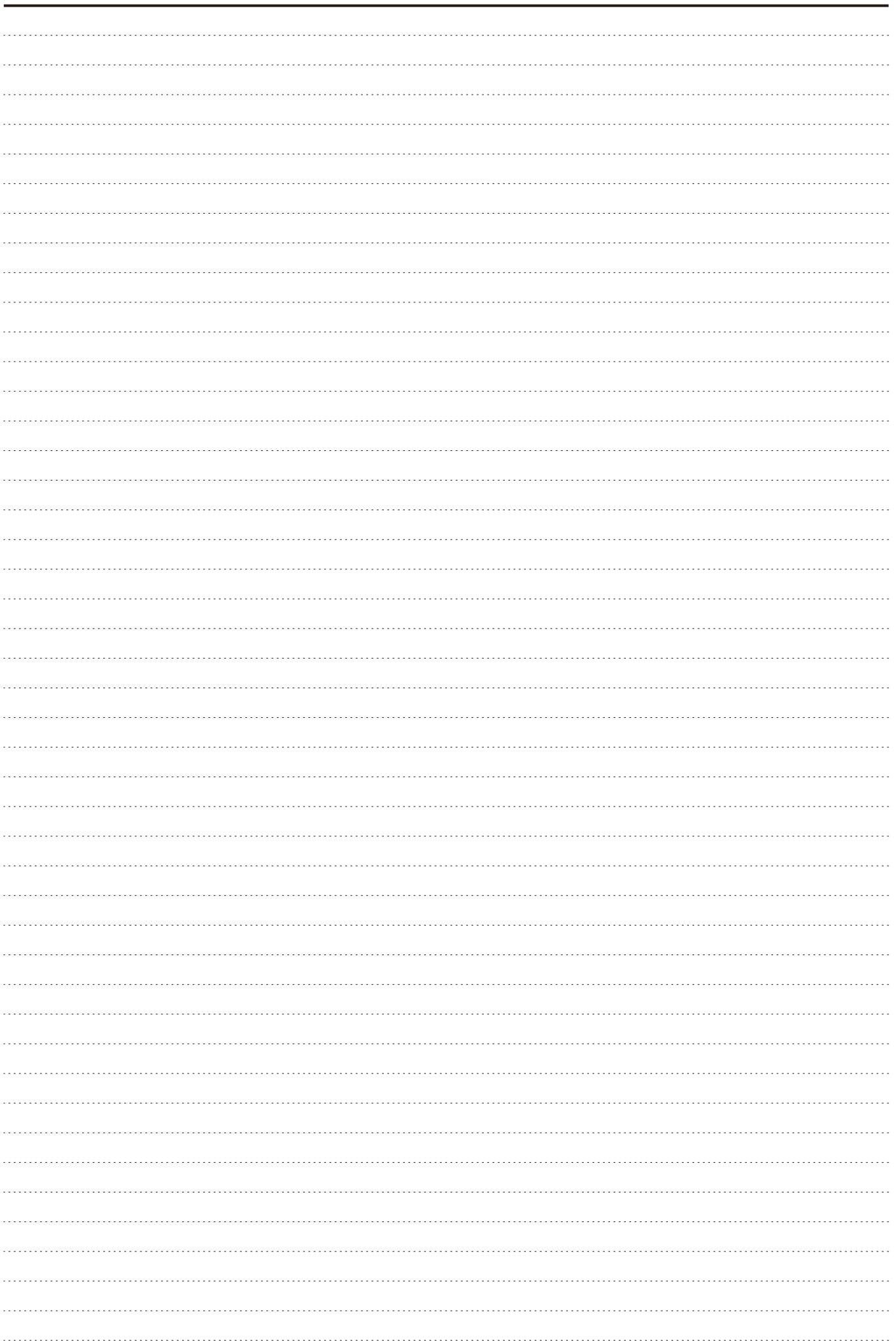
● 4P 30A 300V

Rated current (A)	Electrical system	Frequency (Hz)	Electrical characteristics ( $10^{-3}\Omega/m$ )			Voltage drop between wires (V/m)						
			AC resistance (R)	Reactance (X)	Impedance (Z)	$\cos\theta=1.0$	0.9	0.8	0.7	0.6	0.5	0.4
30	1 $\phi$ 2W (Used for only one circuit.)	50	2.850	0.202	2.857	0.171	0.159	0.144	0.128	0.112	0.096	0.080
		60		0.243	2.860	0.171	0.160	0.146	0.130	0.114	0.098	0.082
	1 $\phi$ 2W (Used for two circuits.)	50		0.537	2.900	0.171	0.168	0.156	0.143	0.128	0.113	0.098
		60		0.645	2.922	0.171	0.171	0.160	0.147	0.134	0.119	0.104
	3 $\phi$ 3W	50		0.183	2.856	0.148	0.137	0.124	0.110	0.096	0.082	0.068
		60		0.219	2.858	0.148	0.138	0.125	0.112	0.098	0.084	0.070
	3 $\phi$ 3W	50										
		60										

〈Factory Line 20〉

● 2P 20A 125V

Rated current (A)	Electrical system	Frequency (Hz)	Electrical characteristics ( $10^{-3}\Omega/m$ )			Voltage drop between wires (V/m)						
			AC resistance (R)	Reactance (X)	Impedance (Z)	$\cos\theta=1.0$	0.9	0.8	0.7	0.6	0.5	0.4
20	1 $\phi$ 2W	50	4.524	0.207	4.529	0.181	0.166	0.150	0.133	0.115	0.098	0.080
		60		0.248	4.531	0.181	0.167	0.151	0.134	0.117	0.099	0.081

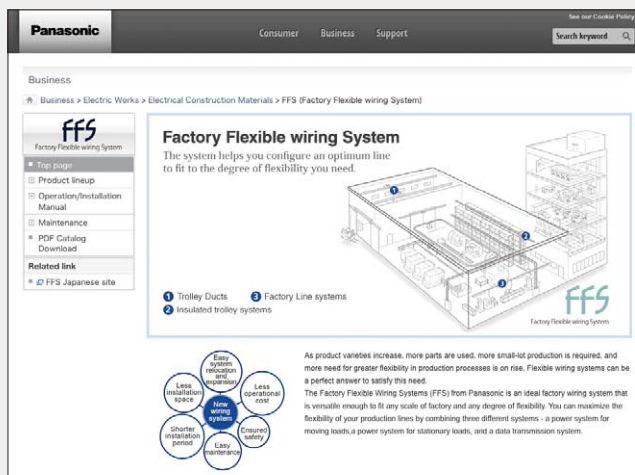






For information on the Panasonic Factory Flexible wiring System, visit

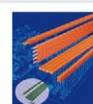
<https://panasonic.net/electricworks/ecm/ffs/>



#### Product Lineup



• **Trolley ducts**  
These products can be used to easily construct various electrical circuits, which provide improved safety, power consumption, and efficiency.



• **Insulated trolley systems**  
This product not only supplies power to high-speed conveyors but also meets a variety of conditions for supplying power to other moving equipment.



• **Factory Line systems**  
The line can be branched and power can be accessed wherever necessary.

※ Note that screen images may be added or updated from time to time.

You can also download specification drawings and Operation/Installation Manuals.

Please contact .....

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