

Panasonic

Factory Line Systems

Factory Line Systems

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

400

200

100·60

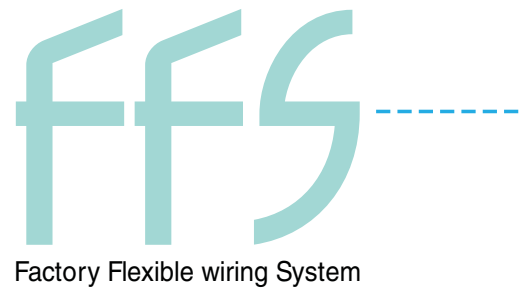
30

20



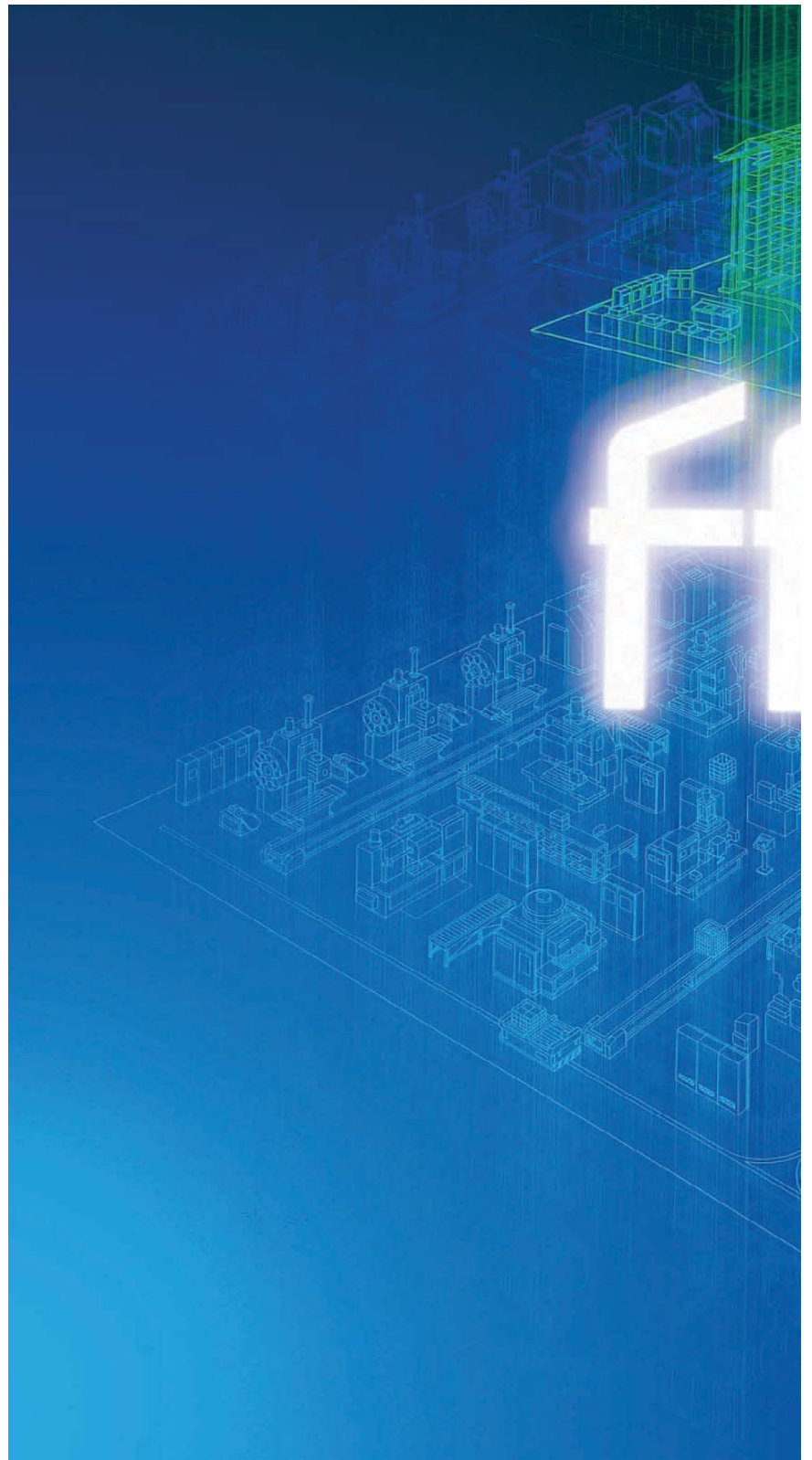
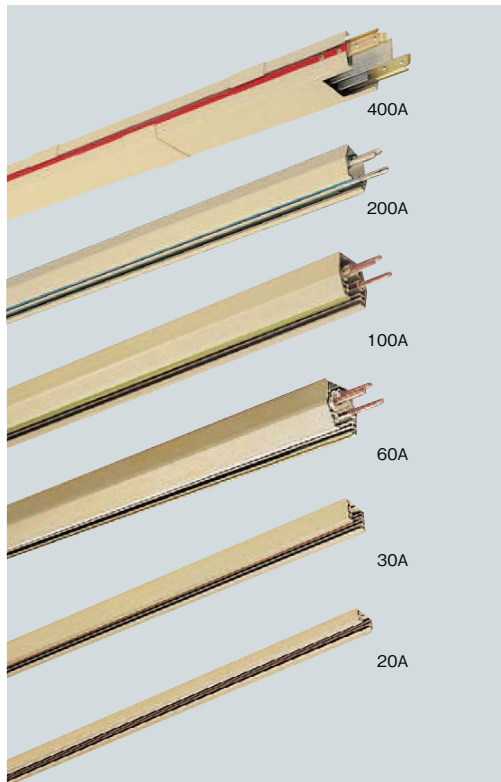
Certified to ISO 9001
Quality Management System

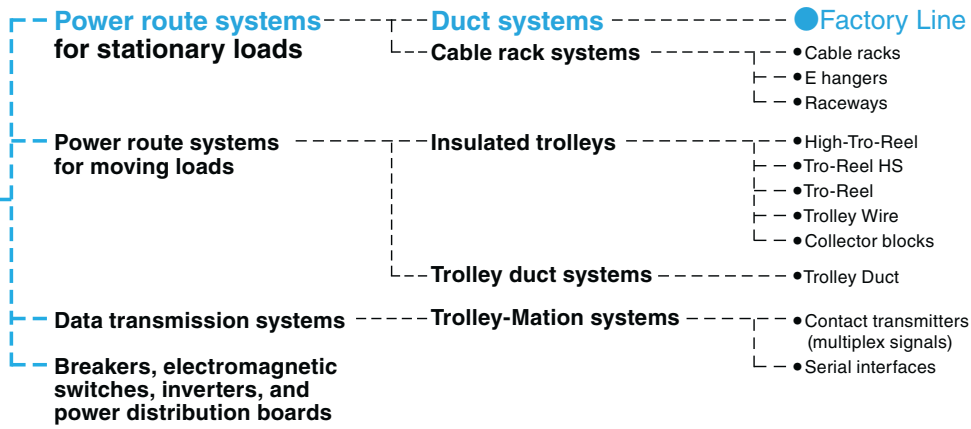
**Now available from Panasonic,
a wide variety of
wiring systems capable of
providing increased flexibility for
your production line.**



With wider varieties of product versions, larger numbers of parts, and smaller production lots, the trends of the times definitely call for greater flexibility in production processes. One source of this needed flexibility is flexible wiring systems. With FFS (Factory Flexible Wiring Systems) from Panasonic, it becomes possible to construct the ideal factory wiring system in accordance with the scale of the factory and the level of flexibility required. By combining the three different types of systems _ power route systems for stationary loads, power route systems for moving loads, and data transmission systems _ a production line can be provided with the utmost flexibility.

Factory Line





Trolley-Mation Systems

Contact transmitters

Serial interfaces

Cable Rack Systems

Cable racks

Raceway

Trolley Duct Systems

Trolley duct

Insulated Trolleys

High-Tro-Reel

Tro-Reel

Tro-Reel HS

Trolley wire

Collector blocks

Factory Line – a flexible wiring system for stationary loads.

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

The total factory wiring system, available in six models: 400, 200, 100, 60, 30, and 20 A.

There are six duct models in the Factory Line system, classified according to the type and capacity of the power supply.

① Factory Line 400: For supplying power to heavy machinery, providing one 3-phase power supply circuit (maximum 400 A).

② Factory Line 200: For supplying power to heavy machinery, providing one 3-phase power supply circuit (maximum 200 A).

③ Factory Line 100: For both main lines and branch lines, providing both a 3-phase power supply (maximum 100 A) and a single-phase power supply (maximum 20 A).

④ Factory Line 60: For both main lines and branch lines, providing both a 3-phase power supply (maximum 60 A) and a single-phase power supply (maximum 20 A).

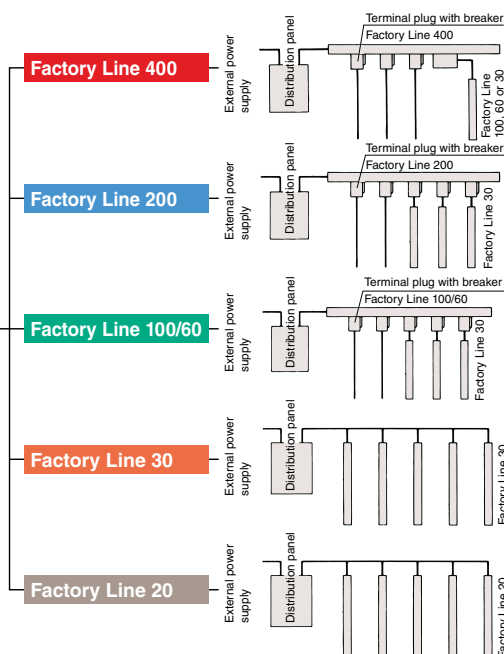
⑤ Factory Line 30: For branch lines. 30 A capacity. Provides either one 3-phase power supply circuit or two single-phase power supply circuit.

⑥ Factory Line 20: For small branch lines.

Provides a single-phase power supply of up to 20 A. Combine these Factory Line systems to create a completely flexible wiring system perfectly suited to the needs of your production line.

Factory Line systems

A total system of factory wiring using ducts.



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

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.

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.






⚠ 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

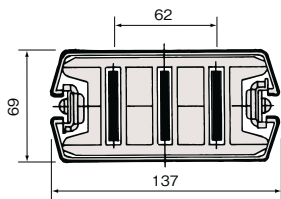
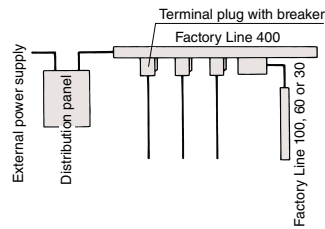
Installing this product requires the qualification as an electrical worker. Be sure to ask a contractor

⚠Warning			
 Prohibited	<ul style="list-style-type: none">●Do not make any modification to this product. Doing so will result in an electric shock, a fire, or a drop.●Do not use it in places with combustion gas. Cause of the explosion.●Do not install the illuminator that becomes a hightemperature like the white heat ball etc. Not doing so will result in an electric shock, a fire.		 Compulsory
	<ul style="list-style-type: none">●Install this product in accordance with the Electrical Equipment Technical Standards (Law) and the Internal Wiring Regulations. 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.●Installation must be carried out according to the "Installation Manual" included with the product. ~Improper installation may result in electric shock, fire, or damage due to equipment falling.~		
⚠Caution			
 Prohibited	<ul style="list-style-type: none">●this product is dedicated to ordinary indoor use, Do not use it at the place which is subject to the influence of heat, such as the upper part of a heater, or a place with moist place and vibration, which receives blowing in of rain, and a moist,,where corrosive gas, where the smoke rises<ul style="list-style-type: none">·A place with moist place and vibration·A place which receives blowing in of rain, and a moist place·A place where corrosive gas, where the smoke rises·The place which is subject to the influence of heat, such as the upper part of a heater Not doing so will result in an electric shock, a fire, or a drop.●Do not install the Factory Line duct. Doing so may result in a fire.●Do not cut the duct of the Factory Line 60, 200 because,the duct is of the Factory Line 60, 200 subjected to special processing at both ends. This may cause electric shock or fire fall.●Do not slide putting the plug in the duct. Poor contact will cause a fire.		 Compulsory
	<ul style="list-style-type: none">●When power supply holes of the Factory Line 400 are not in use, be sure to attach the power supply hole covers. Failing to do so may lead to electric shock or fire caused by dust or other materials.●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.) When installed in the opposite direction may cause electric shock or fire fall.●If you use facts as the branch circuit line is 100 / 60, which mandates the installation of protective devices on the regulatory impact (Article 171 of the interpretation of the current technique),or installation of protective devices, such as using the terminal pulg with a breaker. Failure to install protective devices may cause a fire.●If you uses a remote control plug with breaker terminal,and the operating voltage is 100V (not available in 200V).●For cutting work, wear protective equipment such as safety glasses. Not doing so may cause you to injure your finger.●And after cutting the sandpaper to remove burrs,etc. Not doing so may cause you to injure your finger.●In the Factory Line 100 / 60, 30 in order to prevent the misuse of 100V·200V,on the division must verify the polarity of voltage,voltage display unit label part number label bundled products,feed always put the cap and plug-ins. wrong polarity voltage,causing burns or fire.●If you are using unique and relocation,match the duct together with the polarity and voltage. Not doing so will result in an electric shpck,a fire.		
 Compulsory	<ul style="list-style-type: none">●The opening of the duct,so as to be more aligned towards the bottom. Due to loose connection can cause a fire.●Do not mount the Factory Line 20 upward, when installing the horizontal towards,Where there is no one easy touch it (eg where more than 1.8 m) and duct cover (sold separately) that must be used. Failure to install a duct cover, causing a fire due to ingress of dust.●With the Factory Line 400, ensure that the power supply hole positions and the hanger positions do not overlap Not doing so will result in a fire, or a drop.		

■ Precautions on use

There is longevity in This Product and a standard use period is ten years. It becomes impossible to use finally due to the deterioration of internal if it uses it exceeding the service life. Deterioration advances every year though it differs in the environmental condition and the service space. In order to use the factory-line for a long time, Please contact the specialist in the construction shop etc. when it checks, and trouble is found, and receive the check by the specialist in the construction shop etc. once every three years. Please be sure to observe the following, and the check. Ask an electrical contractor for troubleshooting and maintenance such as expansion of this product. Mounting additional outlet plug requires no qualification as an electrical worker. Before mounting/dismounting or relocating plugs, be sure to turn OFF power supply

<div>⚠Warning</div>											
<div><div></div><div>Prohibited</div></div>	<div><div>●Do not modify to products in any way. May cause fire, electric shock or damage due to falling of equipment.</div><div>●Do not install parts of incompatible. May cause fire, electric shock or damage due to falling of equipment.</div></div>		<div><div></div><div>Compulsory</div></div>								
	<table><tr><td></td><td>Allowable hanging load</td></tr><tr><td>Factory Line 20, 30</td><td>98 N</td></tr><tr><td>Factory Line 60, 100, 200</td><td>196 N</td></tr><tr><td>Factory Line 400</td><td>294 N</td></tr></table> <div>※ 1 kgf=9.8 N</div>				Allowable hanging load	Factory Line 20, 30	98 N	Factory Line 60, 100, 200	196 N	Factory Line 400	294 N
		Allowable hanging load									
Factory Line 20, 30	98 N										
Factory Line 60, 100, 200	196 N										
Factory Line 400	294 N										
<div>●Do not mount any bracket other than dedicated bracket to the Factory Line do not apply weight exceeding that of the dedicated bracket to the Factory Line. Doing so will result in a drop.</div>											
<div>⚠Caution</div>											
<div><div></div><div>Prohibited</div></div>	<div><div>●this product is dedicated to ordinary indoor use, Do not use it at the place which is subject to the influence of heat, such as the upper part of a heater, or a place with moist place and vibration, which receives blowing in of rain, and a moist,,where corrosive gas, where the smoke rises</div><div>·A place with moist place and vibration</div><div>·A place which receives blowing in of rain, and a moist place</div><div>·A place where corrosive gas, where the smoke rises</div><div>·The place which is subject to the influence of heat, such as the upper part of a heater Not doing so will result in an electric shock, a fire, or a drop.</div><div>●Do not pull the plug cable. Doing so may result in faulty connection, thus leading to a fire.</div><div>●Do not slide putting the plug in the duct. Poor contact will cause a fire.</div><div>●Delicated plug for 100V in the Factory Line 100 or 60,do not use the Factory Line30.Because of the different ground-taking. Similarly,the plug for the Factory Line 30,not used 2P 20 A line circuit in the Factory Line 100 / 60. Not doing so may result in an electric shock or a fire.</div></div>		<div><div></div><div>Compulsory</div></div>								
	<div><div>●Before check for the product, be sure to turn OFF the power supply. Not doing so may result in an electric shock.</div><div>●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.</div><div>●Use the range of -10℃ ~ 40℃ ambient temperature The use without of range, burn, or cause a fire.</div><div>●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.</div><div>●Use this product for the transmission of information, The transmission performance might be deteriorated because of the signal decay in connected part.</div></div>										



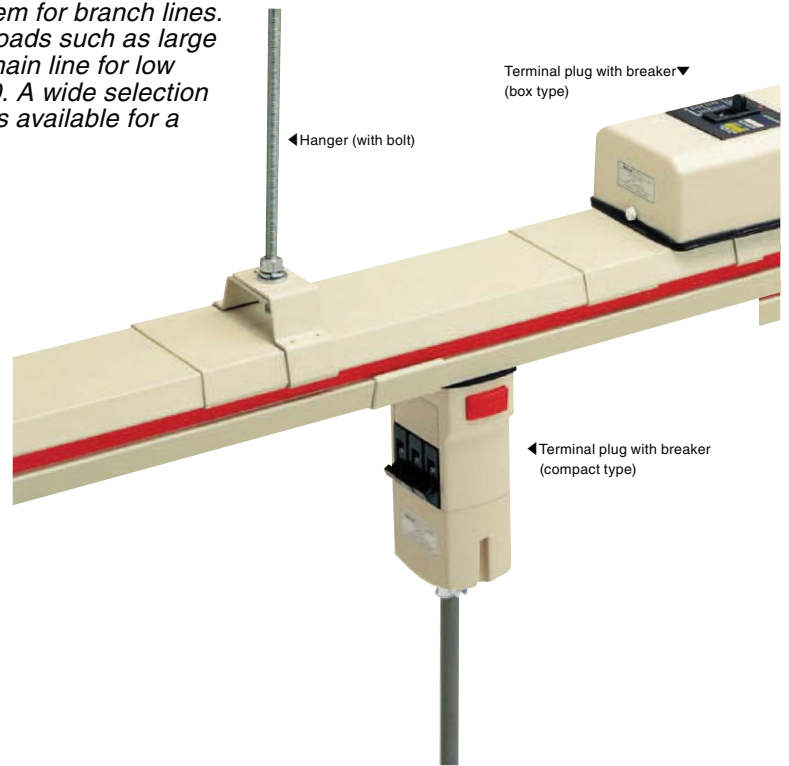
Factory Line 400

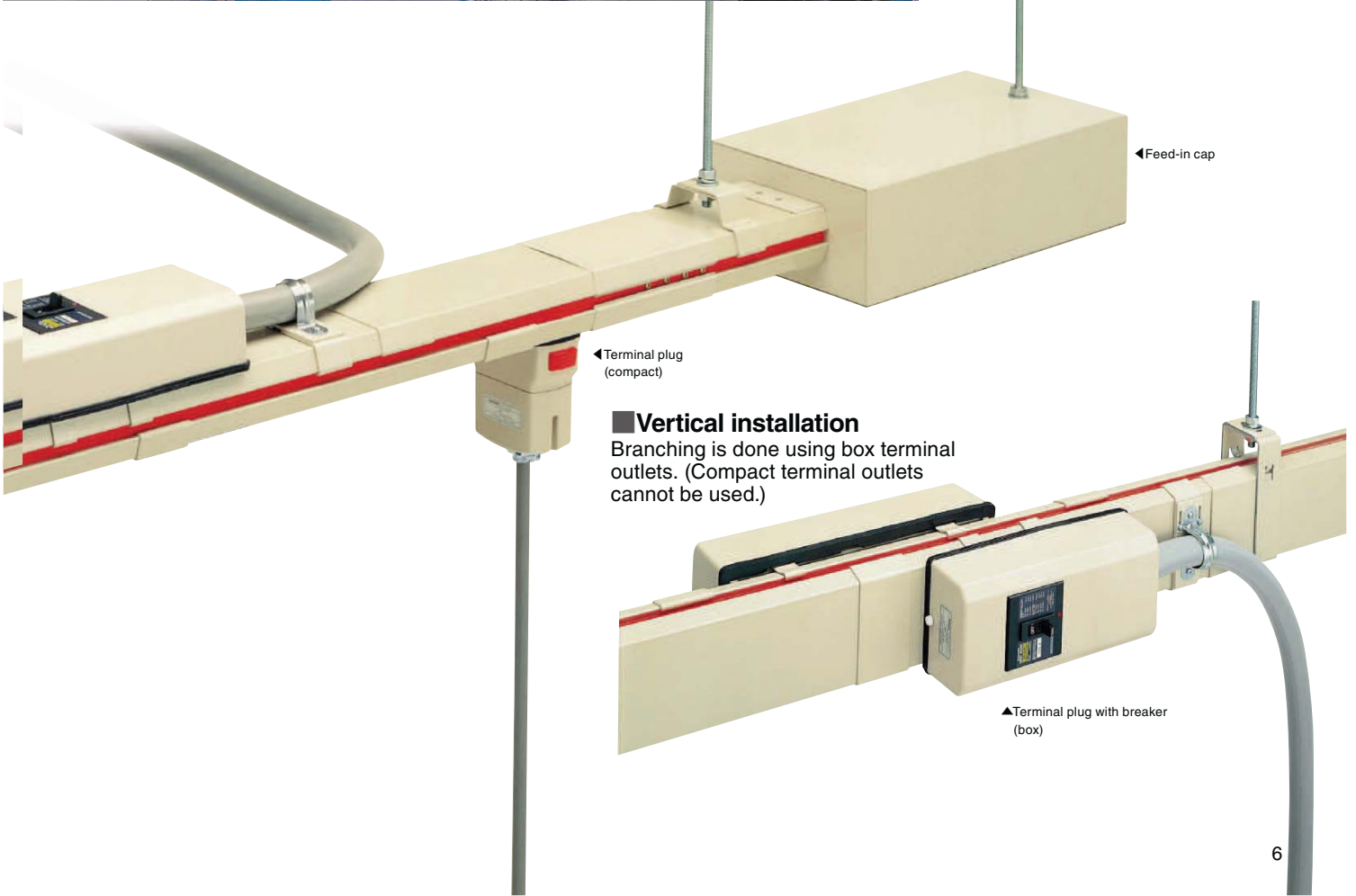
Factory Line 400 is a plug-in duct system which provides a 3-phase power supply for high power loads.

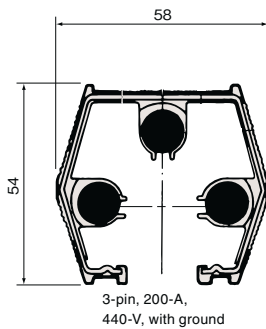
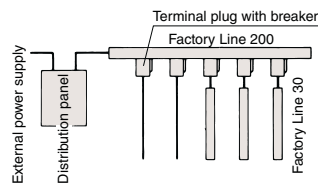
Factory Line 400 is a 3-phase, 400 A plug-in duct system for branch lines. It can also be used for direct branching to high power loads such as large machine tools, lathes, presses, dryers, etc., and as a main line for low power branch circuits using Factory Line 100, 60, or 30. A wide selection of terminal 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.



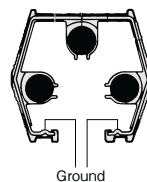




Factory Line 200

The Factory Line 200 is a high-capacity duct capable of 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 200-A or single-phase three-wire 200-A 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.

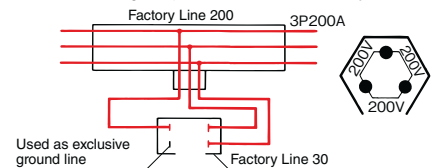


3-pin, 200-A, 440-V circuit
For direct branching to large drive loads or for branching to a Factory Line 30.

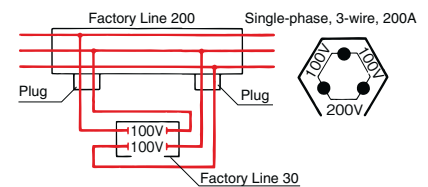


Method for branching from Factory Line 200 to Factory Line 30.

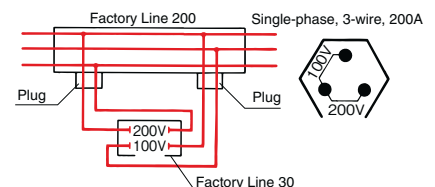
- To obtain a single 3-phase circuit from Factory Line 200



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

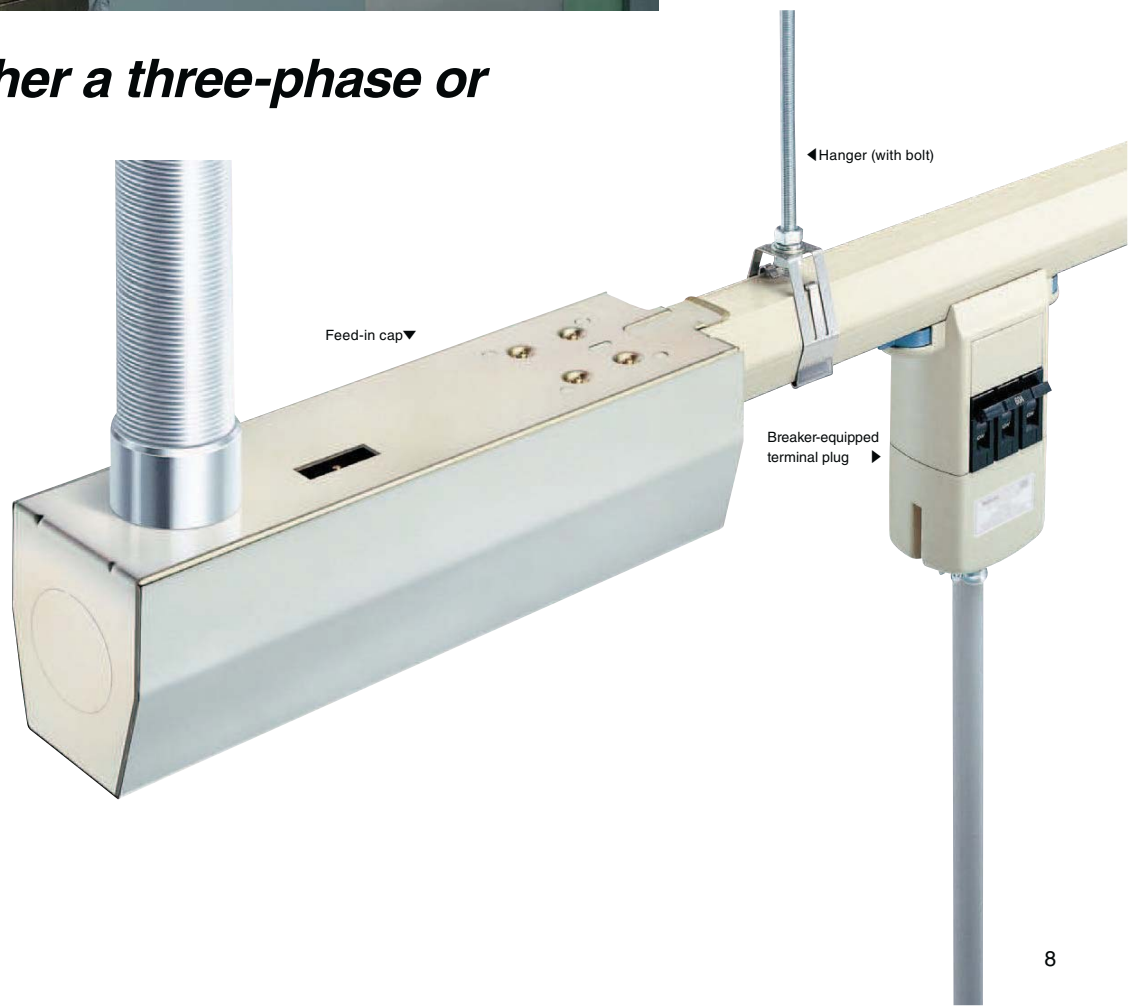


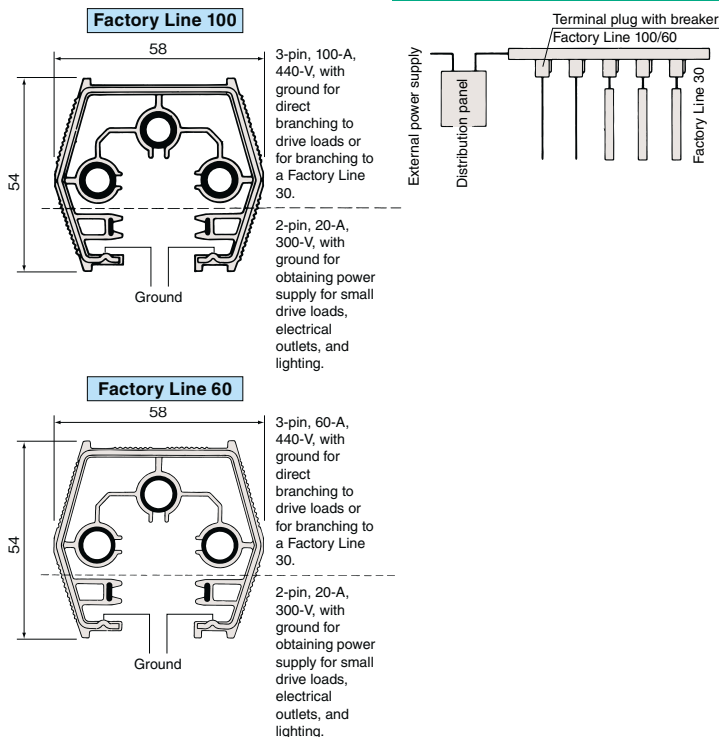
- To obtain single-phase 100V and single-phase 200V from Factory Line 200





providing either a three-phase or



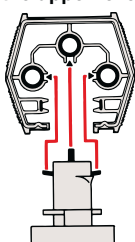


Factory Line 100·60

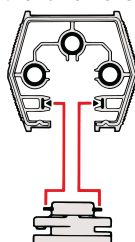
The Factory Line 100 and Factory Line 60 are multipurpose providing both three-phase and single-phase power supply

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 100-A or single-phase three-wire 100-A; Factory Line 60: either three-phase 60-A or single-phase three-wire 60-A) 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 20-A 250-V (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.

●Branching from the upper level



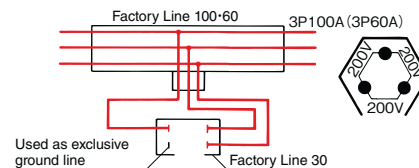
●Branching from the lower level



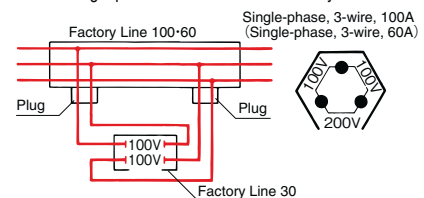
* The plugs for the Factory Line 30 cannot be used with the Factory Line 100 or Factory Line 60 because the ground connections are different.

■Method for branching from the 3 wires of the upper level to Factory Line 30 [Items in parentheses are for Factory Line 60.]

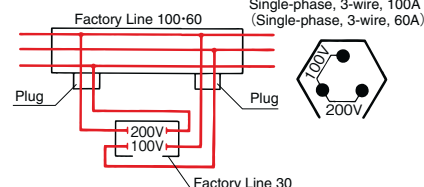
- To obtain a single 3-phase circuit from Factory Line 100 · 60:



- 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:





**use ducts capable of simultaneously
plies.**

Panafleki Ace▶

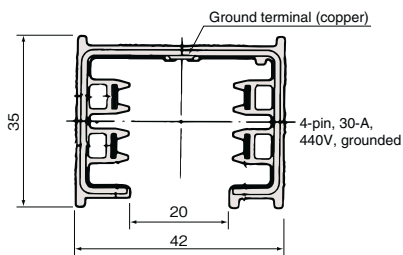
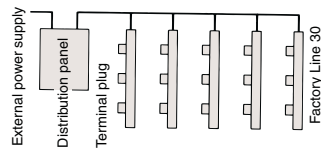


▲Feed-in cap

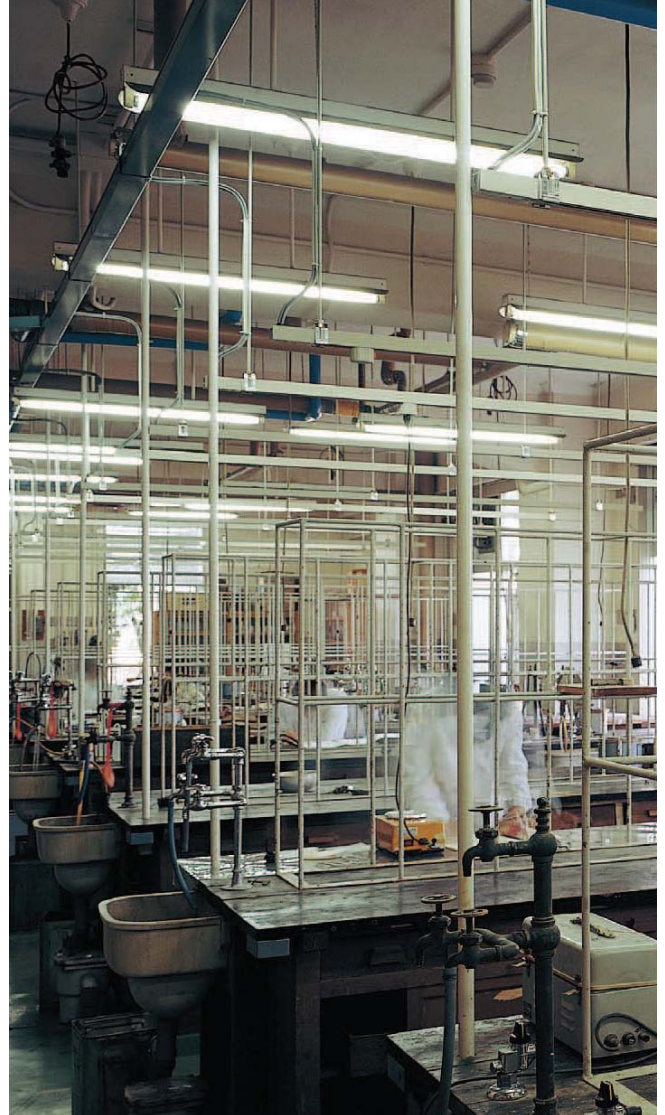
◀Hanger (with bolt)

▲Terminal plug

▲Terminal plug with breaker



Factory Line 30

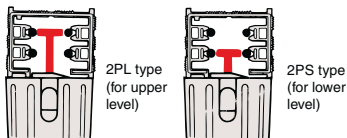


The Factory Line 30 is a four-wire type duct capable of or simultaneously two single-phase circuits.

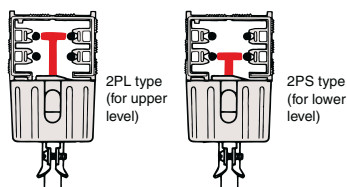
In the Factory Line 30 ducts, four conductors are separated into an upper level and a lower level. Thus, either one three-phase drive load circuit can be obtained, or the upper and lower levels of the same duct can be separated into two single-phase power supply circuits. In addition, by using the upper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

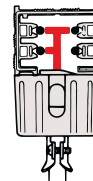


● Terminal plug (for 100, 200 V)



(Plugs for fluorescent lights are the same.)

● Terminal plug (for three-phase 200 V)



* 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.

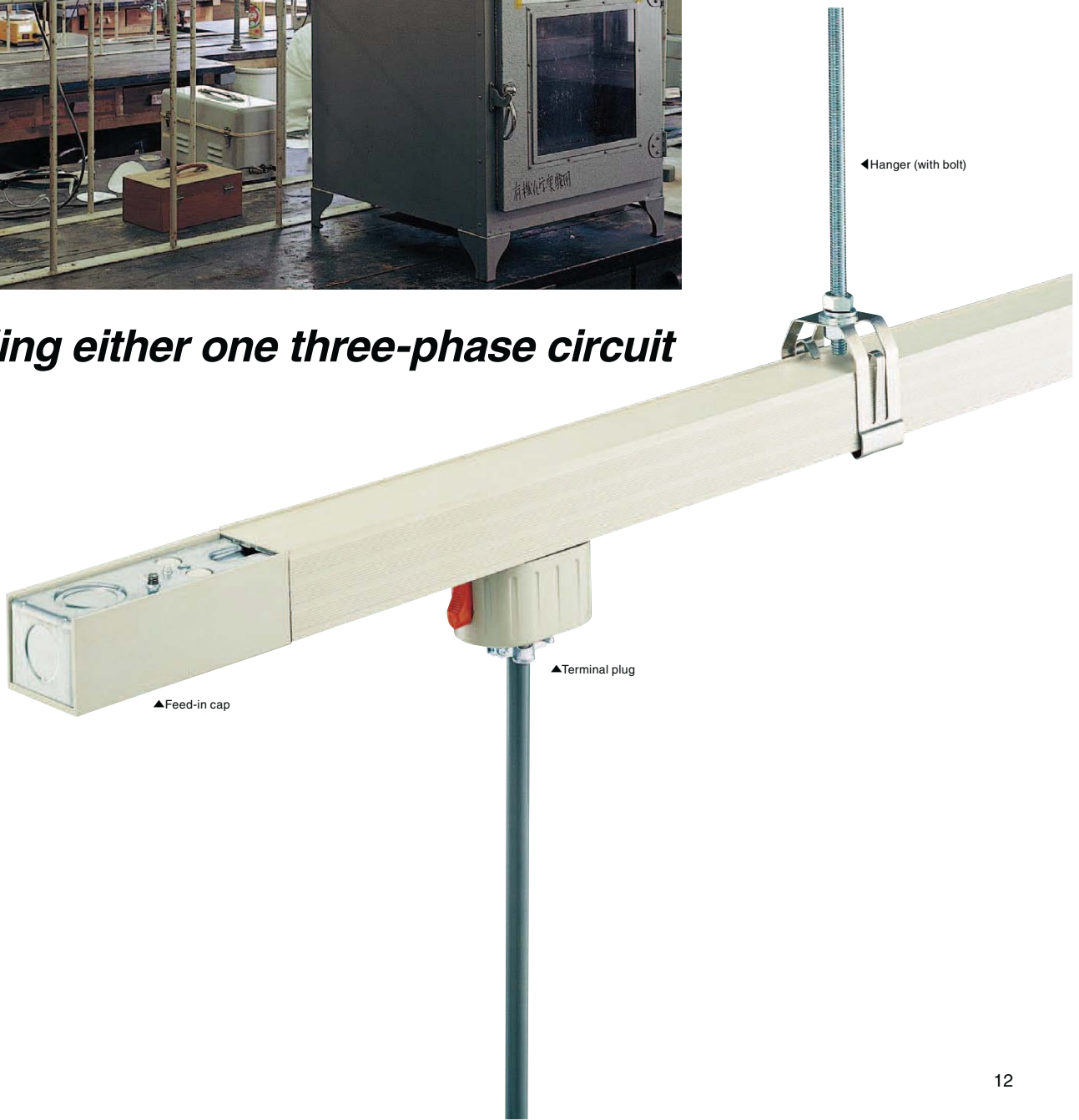
* Do not use plugs for Factory Line 30 for Factory Line 400, 200, 100, 60, and 20 due to differences in the grounding methods and dimensions.

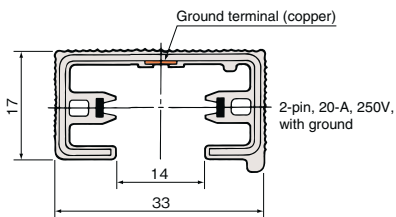
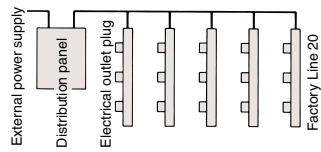
[Caution]

To prevent improper use of 100V or 200V power, be sure to affix a voltage indication label, which comes with the Factory Line, to the Factory Line duct and the plug respectively after the completion of installation work.

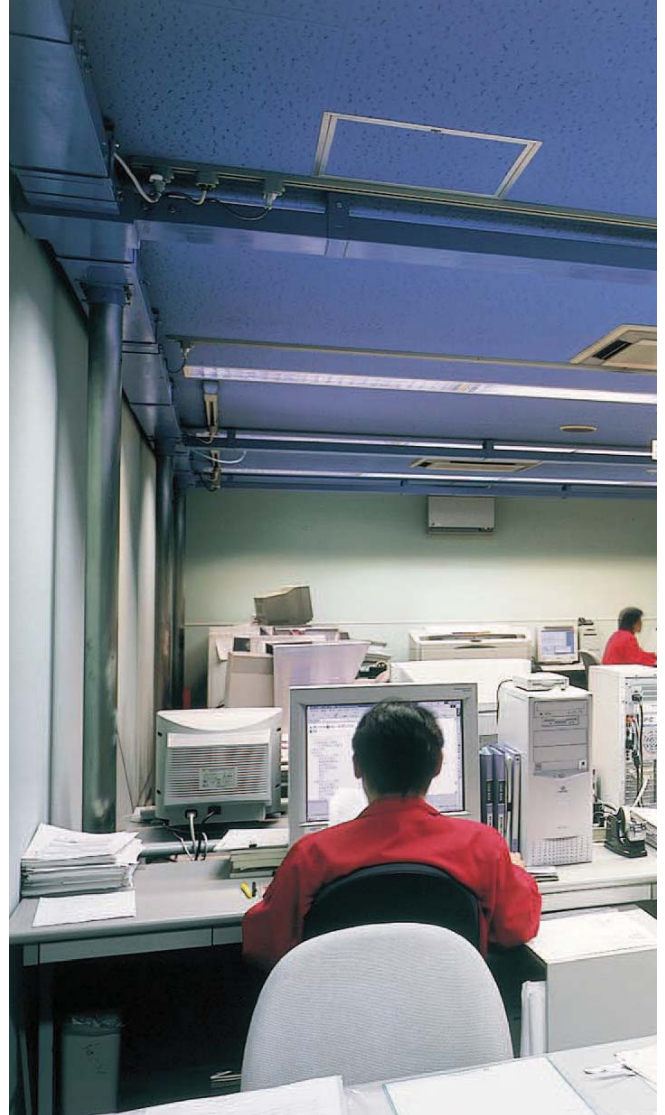


providing either one three-phase circuit





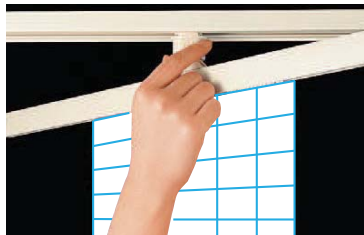
Factory Line 20



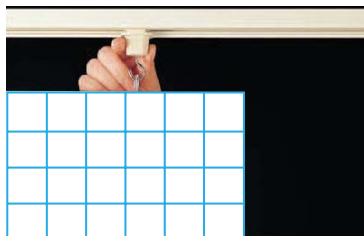
The Factory Line 20 is a duct for small-scale branching power supply circuit.

The Factory Line 20 is a duct for small-scale branching, and it contains a conductor for one single-phase 250-V circuit. It is ideal for providing the power supply for task lamps and electrical outlets, and fluorescent line 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 clip

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



● Locking plug socket



● Reel-type plug socket



capable of providing one single-phase



Pipe suspension Hanger▶

◀Locking electrical Terminal plug

▲Feed-in cap

Reel-type plug socket▶

Actual examples of the wide range of Factory Line applications



Electronic component assembly line

Even if the layout of the line is changed, power supply for lighting and small drive loads can be adapted immediately.

New product development is an extremely important part of the electronic component industry, so changes must frequently be made in the layout of the production line.

Here, the Factory Line 30 is installed across the entire ceiling, thus making it possible to obtain the power supply for fluorescent lighting fixtures and small drive loads at the optimum location in accordance with changes in the line layout.

Automotive assembly line

The power supply for both lighting and electrical outlets can be obtained simultaneously from a single duct.

This is an automotive FMS line on which different car models are assembled at the same time, and various power supplies are needed, such as for lighting and large-capacity electrical outlets.

This is the perfect place for application of the Factory Line 100, which is capable of simultaneously providing different three-phase and single-phase power supplies.





Sewing line

In addition to complete freedom in layout changes, safety in the workplace is greatly improved.

In a clothing factory, the positions of the sewing machines have to be changed frequently to accommodate changes in the season and in designs. By installing the large-capacity Factory Line 100 on the ceiling, not only can the sewing machines be placed in any location, but the danger of tripping on cables strewn across the floor is also eliminated.





Metalwork line

Three-phase and single-phase power supplies can both be obtained easily, and the appearance of the factory is also improved.

With lines consisting of stand-alone type machine tools, there has always been the tendency for power cords and cables to be strewn about in disorder. With the Factory Line 100, this problem is completely eliminated. The cords can be kept to the minimum length required, and this also contributes to improving the appearance of the factory.



Large stores

Lighting and electrical outlets at the same time. Design coordinates well with lightweight frame ceilings.

This is an example of using the Factory Line 30 in a large store having a lightweight frame ceiling of the kind that is currently so common. Not only is the Factory Line 30 extremely functional, providing two single-phase power supply circuits from a single duct, but its design also coordinates well with the ceiling. The Factory Line goes well with the decor and atmosphere of modern-looking stores.



Electrical component assembly line

Since the takeoffs for power can be freely placed, there are no limitations on where to place equipment when installing.

This is an example of use of Factory Line 100 on a newly installed line.

If the factory line for electrical outlets and machinery power is installed next to the lights, then wherever assembly equipment is placed, 3-phase and single-phase power will be close at hand.



Schools (practical rooms)

The cables are not drawn on the floor, which can contribute to the safe work environment.

In this case, Factory Line 30 is adopted as power supply for soldering irons used in the practical room. Because two circuits can be obtained from one duct, it is possible to use many pieces of soldering irons. Also the cables are not drawn on the floor making cleaning after the work easy.

Products in the Factory Line system

Factory Line 400

A wide selection of ducts and accessories are available to complete a full factory power supply system.

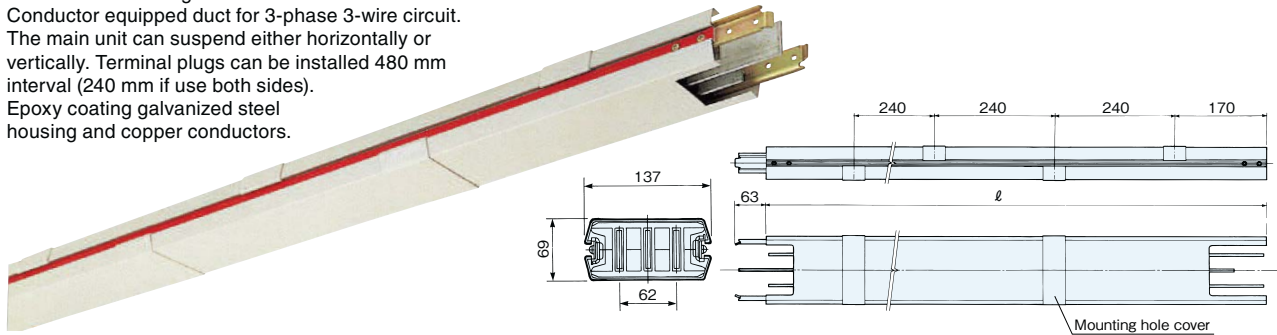
■ Factory Line 400 main unit (ivory-gray finish)

3P 400A 300V with ground.

Conductor equipped duct for 3-phase 3-wire circuit.

The main unit can suspend either horizontally or vertically. Terminal plugs can be installed 480 mm interval (240 mm if use both sides).

Epoxy coating galvanized steel housing and copper conductors.



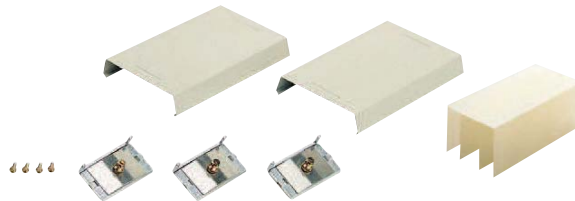
Cat. No.	Length ℓ (mm)	Weight (kg)
DH28110	1,000	9.3
DH28120	2,000	18.5
DH28130	3,000	27.8

■ Joiner (ivory-gray finish)

For Factory Line 400 system.

3P 400A 300V with ground.

Connecting main units and conductors. Consists of three conductor couplers, one separator, two connection covers and four mounting screws. Epoxy coating galvanized steel housing.



Cat. No.	Weight (kg)
DH2831	1.1

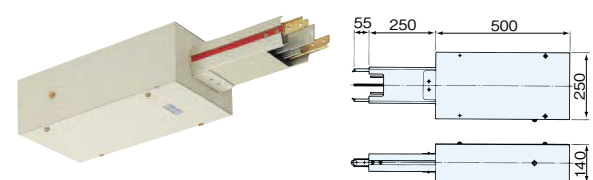
■ Feed-in cap (ivory-gray finish)

For Factory Line 400 system. 3P 400A 300V with ground.

Supplying power at an end of the main unit.

Crimp-on terminals required: 200 to 250 mm².

Epoxy coating galvanized steel housing.



Cat. No.	Weight (kg)
DH2821	10.8

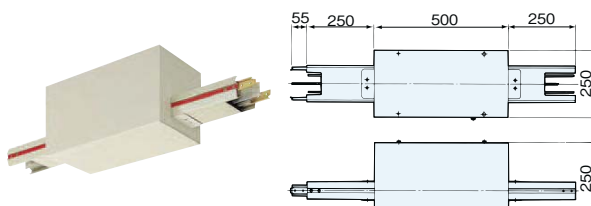
■ Center feed-in joiner (ivory-gray finish)

For Factory Line 400 system. 3P 400A 300V with ground.

Supplying power between the main units and connecting them.

Crimp-on terminals required: 200 to 250 mm².

Epoxy coating galvanized steel housing.



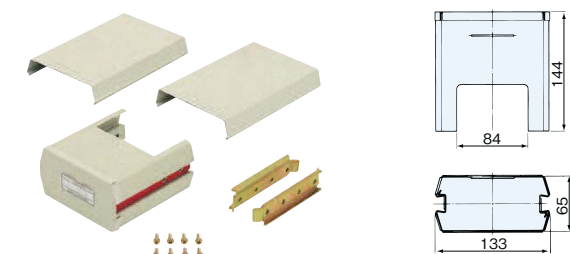
Cat. No.	Weight (kg)
DH2822	19.9

■ End cap (ivory-gray finish)

For Factory Line 400 system.

Closing an end of the main unit.

Epoxy coating galvanized steel housing.



Cat. No.	Weight (kg)
DH2823	0.5

■ Hanger (with bolt) for vertical suspension (ivory-gray finish)

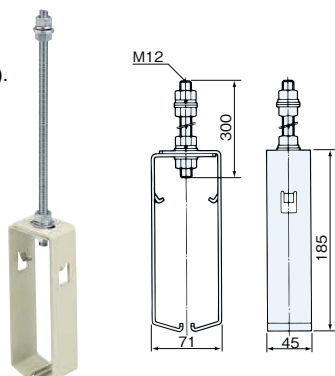
For Factory Line 400 system.

Suspending main units vertically from the building structure.

Epoxy coating steel hanger and galvanized bolt (300mm).
Standard hanger mounting spacing 1.5m.

[Caution]

Suspending weight must be below 30kg on each hanger.



Cat. No.	Weight (kg)
DH2851	0.81

■ Hanger (with bolt) for horizontal suspension (ivory-gray finish)

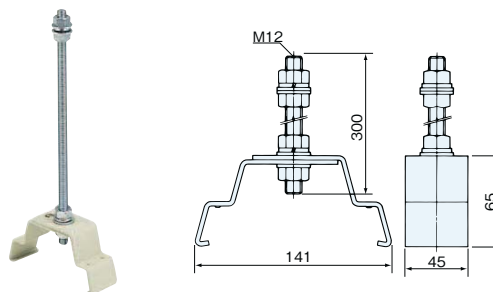
For Factory Line 400 system.

Suspending main unit horizontally from the building structure.

Epoxy coating steel hanger and galvanized bolt (300mm).
Standard hanger mounting spacing 1.5m.

[Caution]

Suspending weight must be below 30kg on each hanger.



Cat. No.	Weight (kg)
DH2853	0.59

■ Hanger (without bolt) for vertical suspension (ivory-gray finish)

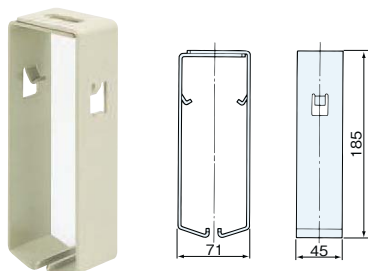
For Factory Line 400 system.

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

Epoxy coating steel hanger.

[Caution]

Suspending weight must be below 30kg on each hanger.



Cat. No.	Weight (kg)
DH2852	0.52

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

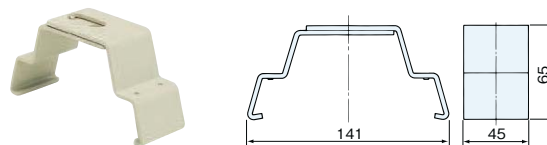
For Factory Line 400 system.

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

Epoxy coating steel hanger.

[Caution]

Suspending weight must be below 30kg on each hanger.



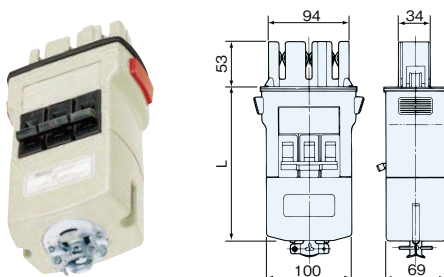
Cat. No.	Weight (kg)
DH2854	0.3

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

For Factory Line 400 system. 3P 20A/30A/60A 200V with ground.

Power plug with Miniature Circuit Breaker.

Can be mounted only the bottom side of the horizontally installed main unit.



Cat. No.	Rating	L	Weight (kg)
DH2882K1	3P20A200V with ground	164	1.3
DH2883K1	3P30A200V with ground	164	1.3
DH2886K1	3P60A200V with ground	184	1.3

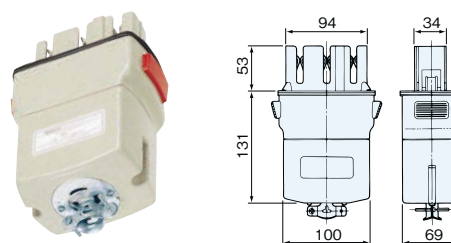
■ Terminal plug (compact type) (ivory-gray finish)

For Factory Line 400 system. 3P 60A 300V with ground.

Power plug for the main unit.

Can be mounted only the bottom side of the horizontally installed main unit.

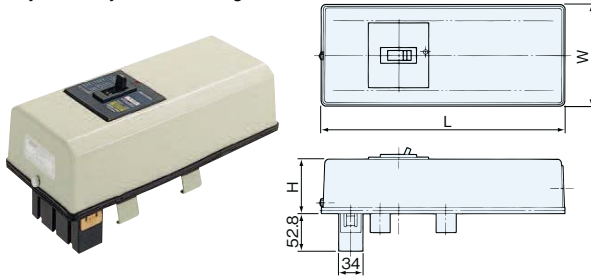
ABS resin housing.



Cat. No.	Rating	Weight (kg)
DH2896	3P60A300V with ground	0.8

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

For Factory Line 400 system. 3P 100A/225A 200V with ground.
Power plug with Molded Case Circuit Breaker.
Can be mounted both horizontally and vertically installed main unit.
Polymer alloy resin housing.



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

Cat. No.	Rating	W	L	H	Weight (kg)
DH2887K1	3P100A200V with ground	146	341	82	2.5
DH2888K1	3P225A200V with ground	163	453	115	5.2

■ Cable support (ivory-gray finish)

For Factory Line 400 system.

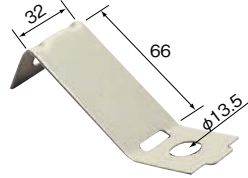
Secure the connecting cable to the box type terminal plug with breaker. Epoxy coating galvanized steel hook and galvanized steel saddle.



Cat. No.	Rating	Weight (kg)
DH2897	100A	0.35
DH2898	225A	0.35

■ Anti-swing fixture (ivory-gray finish)

For Factory Line 400, 200, 100/60 and 30 systems.
Prevent suspension bolts from swinging.
Use 2 pieces if secure both sides.
Epoxy coating galvanized steel.



Cat. No.	Weight (kg)
DL741Y	0.1

■ Socket wrench

This wrench specially designed for tightening conductor joints makes tightening operations easier.



Cat. No.	Weight (kg)
DH2899	0.07

Factory Line 200

■ Factory Line 200 main unit (cream-gray finish: Munsell 5Y7.2/1.4)

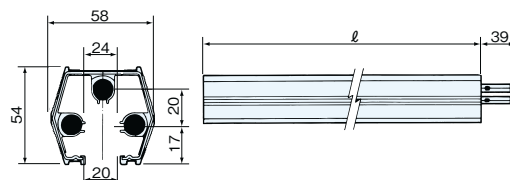
3P 200A 300V with ground.

Conductor equipped ducts for the 3-phase 3-wire circuit. Attaches a joiner-pin protect cap. Galvanized steel core PVC resin housing and copper conductors.

[Warning] Use the main units at the standard length.



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



■ Duct cover

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

Protect from entering foreign bodies or dusts into main unit.

Length 1m. Made of PVC resin.



Cat. No.	Weight (kg)
DH2799	0.06

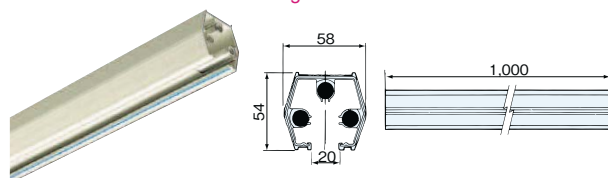
■ Factory Line 200 auxiliary main unit (cream-gray finish)

For Factory Line 200 system. 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. Galvanized steel core PVC resin housing and copper conductors.

[Warning]

Use this unit at the standard length.



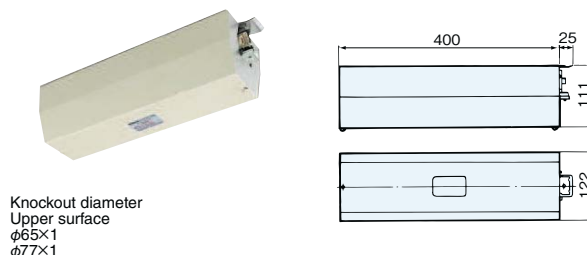
Cat. No.	Weight (kg)
DH2510	4.8

■ Feed-in cap (cream-gray finish)

For Factory Line 200 system. 3P 200A 300V with ground.

Supplying power at an end of the main unit.

Epoxy coating galvanized steel housing.



Knockout diameter
Upper surface
 $\phi 65 \times 1$
 $\phi 77 \times 1$

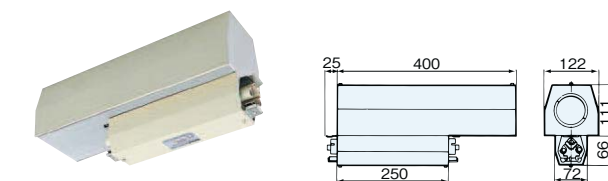
Cat. No.	Weight (kg)
DH2521	2.6

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

For Factory Line 200 system. 3P 200A 300V with ground.

Supplying power between main units and connecting them.

Epoxy coating galvanized steel housing.



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)

For Factory Line 200 system.

Connecting ground lines of main units electrically.

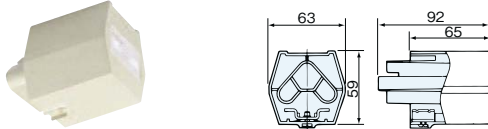
Nylon molding body. Cannot supply power with this part.



Cat. No.	Weight (kg)
DH2531	0.12

■End cap (cream-gray finish)

For Factory Line 200 system.
Closing an end of the main unit.
ABS resin molding.

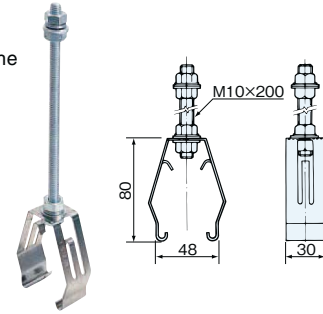


Cat. No.	Weight (kg)
DH2523K	0.06

■Hanger (with bolt)

For Factory Line 200 and 100/60 systems.
Suspending main unit from the building structure.
Stainless steel hanger with galvanized bolt (200mm).

[Caution]
Suspending weight must be below 20kg on each hanger.



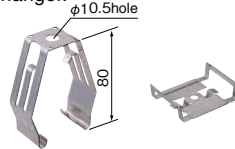
Cat. No.	Weight (kg)
DH2451	0.18

■Hanger (with earthquake resistant reinforcement fixtures)

For Factory Line 200, 100/60 systems.
Attaching main unit directly to the building structure or suspending with supplied bolts. Stainless steel hanger.

[Caution]

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



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.

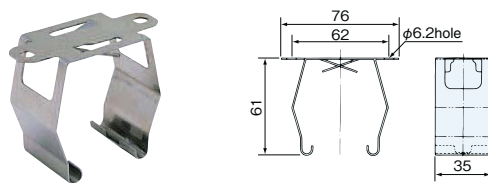


Cat. No.	Weight (kg)
DH2457	0.01

■Ceiling direct-mounting hanger

For Factory Line 200 and 100/60 systems.
Mounting main unit directly to the ceiling.
Stainless steel hanger.

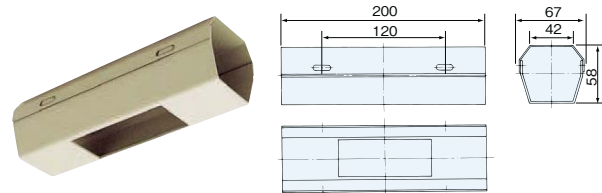
[Caution] ①Main unit cannot fasten directly to the building structure without using hangers.
②Suspending weight must be below 20kg on each hanger.



Cat. No.	Weight (kg)
DH2453	0.03

■Connection reinforcement fixture (cream-gray finish)

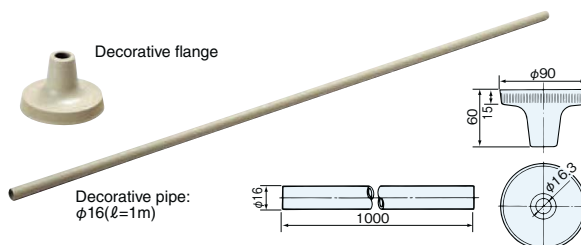
For Factory Line 200 and 100/60 systems.
To keep straight the joint part of the main unit suspended by long bolts. Epoxy coating galvanized steel.



Cat. No.	Weight (kg)
DH2454	0.51

■Decorative flange and pipe (cream-gray finish)

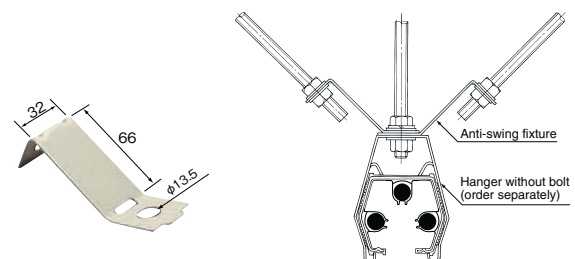
For Factory Line 200, 100/60 and 30 systems.
Hide the suspension bolt for good appearance.
Cut the decorative pipe into the length of the suspension bolt.
Melamine coated steel pipe and ABS resin flange.



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

■Anti-swing fixture

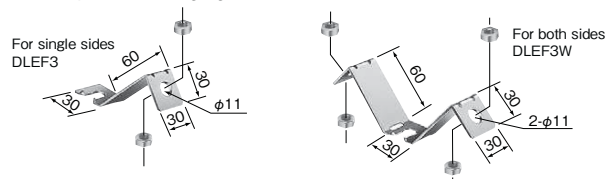
For Factory Line 400, 200, 100/60 and 30 systems.
Prevent suspension bolts from swinging.
Use 2 pieces if secure both sides.
Epoxy coating galvanized steel.



Cat. No.	Weight (kg)
DL741Y	0.1

■ Hanger bolt anti-swing fixture
(electro-galvanized)

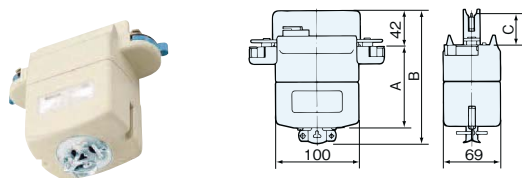
For Factory Line 200, 100/60 and 30 systems. Eliminates need to pass through hanger bolt before processing. Can be fitted to existing bolts to prevent swinging.



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

■ Terminal plug (cream-gray finish)

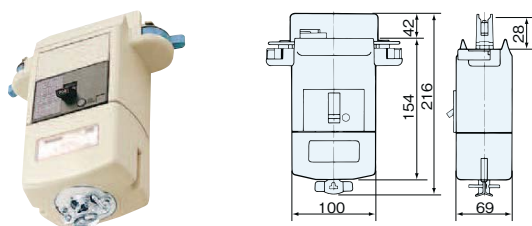
For Factory Line 200 system. 3P 30A/60A 300V with ground.
ABS resin housing.



Cat. No.	Rating	Weight (kg)	A	B	C
DH2581	3P30A300V with ground	0.5	97	159	38
DH2580	3P60A300V with ground	0.5	117	179	39

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

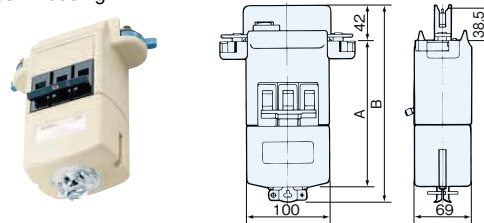
For Factory Line 200 systems.
3P 20A 200V with ground. 3P 30A 200V with ground. Built-in
leakage breaker. Available in 2 types with different current
sensitivities and therein a further 2 types each with different ratings



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

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

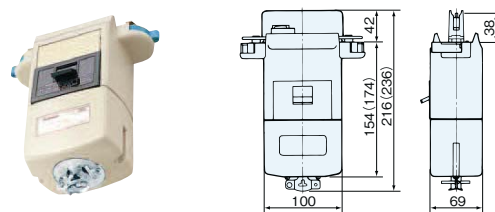
For Factory Line 200 system. 3P 20A/30A/60A 200V with ground.
Power plug with Miniature Circuit Breaker.
ABS resin housing.



Cat. No.	Rating	Weight (kg)	A	B
DH2582K1	3P20A200V with ground	1.35	154	216
DH2583K1	3P30A200V with ground			
DH2586K1	3P60A200V with ground		174	236

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

For Factory Line 200 system. 3P 200V with ground. Built-in motor breaker (BBW-30CM)



The inner size of () is DH25879K1.

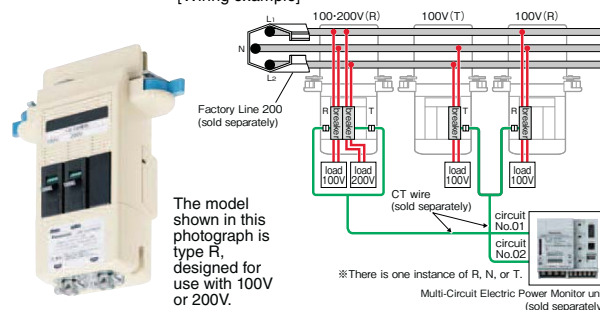
Cat. No.	Motor rating	Rating	Weight (kg)
DH25871K1	0.2kW	3P200V with ground	1.35
DH25872K1	0.4kW		
DH25873K1	0.75kW		
DH25874K1	1.0kW		
DH25875K1	1.5kW		
DH25876K1	2.2kW		
DH25877K1	3.7kW		
DH25878K1	5.5kW		
DH25879K1	7.5kW		

■ Terminal plug with built-in CT breaker
(cream-gray finish)

For Factory Line 200 systems.
This is a terminal plug with a built-in CT breaker. Combine this product with the Panasonic Multi-Circuit Electric Power Monitor to measure the electric energy of each circuit.

- This plug is dedicated for single-phase use. It cannot be used in three-phase operation.
- Be sure to connect or short the CT wire.

[Wiring example]



Cat. No.	Type	Rating	Weight (kg)
DH25882R	R	2P20A100V with ground	1.2
DH25882T	T	2P30A200V with ground	
DH25881R	R	For twin ground	1.1
DH25881T	T	2P15A125V locking	

Factory Line 100·60

■ Factory Line 100/60 main unit (cream-gray finish: Munsell 5Y7.2/1.4)

Factory Line 100: 3P 100A 300V + 2P 20A 300V with ground.

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

Conductor equipped ducts. The upper 3 conductors are for the 3-phase 3-wire circuit or the single phase 3-wire circuit.

The lower 2 conductors are for the single phase circuit.

Attaches a joiner-pin protect cap.

Galvanized steel core PVC resin housing and copper conductors.

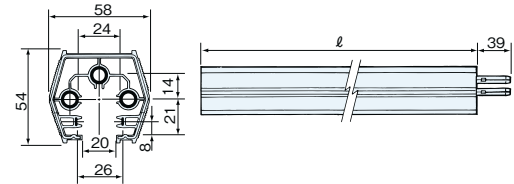
[Warning]

Use Factory Line 60 main units at the standard length.

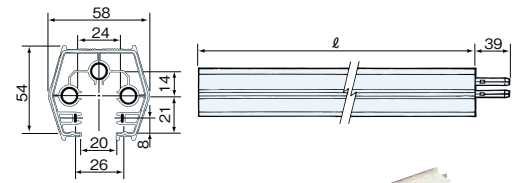


	Cat. No.	Length ℓ (mm)	Weight (kg)
Factory Line 100	DH2411	1,000	3.3
	DH2412	2,000	6.6
	DH2413	3,000	9.9
Factory Line 60	DH2311	1,000	3.1
	DH2312	2,000	6.1
	DH2313	3,000	9.1

● Factory Line 100



● Factory Line 60



■ Duct cover

For Factory Line 100/60 and 30 systems.

Protect from entering foreign bodies or dusts into main unit.

Length 1m. Made of PVC resin.

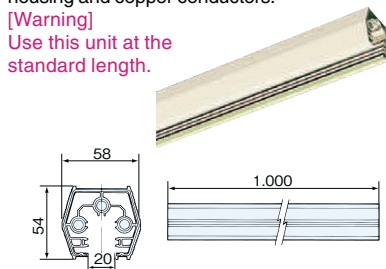
Cat. No.	Weight (kg)
DH2799	0.06

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

For Factory Line 60 system. 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. Galvanized steel core PVC resin housing and copper conductors.

[Warning]

Use this unit at the standard length.



Cat. No.	Weight (kg)
DH2310	3.3

■ Feed-in cap (cream-gray finish)

For Factory Line 100/60 system. 3P 100A 300V + 2P 20A 300V with ground.

Supplying power at an end of the main unit.

Epoxy coating galvanized steel housing.



Knockout diameter
Upper surface
38.8 dia. \times 1
21.5 dia. \times 1

Side surface
38.8 dia. \times 1

Solderless terminals
not required

Cat. No.	Weight (kg)
DH2421	1.1

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

For Factory Line 100 system. 3P 100A 200V + 2P 20A 300V with ground.

(3P 100A N-BAK-100 with built-in breaker)



Knockout diameter
Upper surface
 ϕ 38.8 \times 1
 ϕ 21.5 \times 1

Side surface
 ϕ 38.8 \times 1

Solderless terminals
not required

Cat. No.	Weight (kg)
DH2424K1	3.1

■ Feed-in cap with current monitor (cream-gray finish)

For Factory Line 100/60 systems. 3P 100A 300V + 2P 20A 100V with ground.

● 3-color LED (light emitting diode) displays the approximate current value through the 3-wire circuits in 3 levels. (Compatible with single phase 3-wire and 3-phase 3-wire circuits)

● Equipped with external contacts (no voltage, a contact), enabling contact signal transmission. Can be incorporated into systems for warning lamps or PLC (Programmable Logic Controller) to prevent breaker trip by warnings.

<Main specifications>

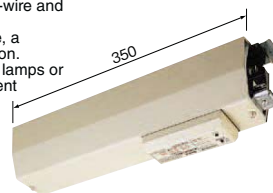
Rated voltage: AC 100V

* Power supply to lower conductors is AC 100V.

Measurable ampere: 30~100 [Arms]

Function: 60A Rated/100A

Switchover switch, reset function, external output (no voltage, a contact)



Knockout diameter
Upper surface
 ϕ 38.8 \times 1 ϕ 21.5 \times 1

Side surface
 ϕ 38.8 \times 1

Cat. No.	Weight (kg)
DH2425	2.0

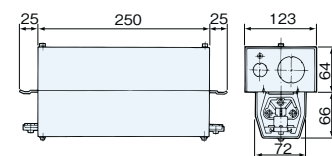
■ Center feed-in joiner (cream-gray finish)

For Factory Line 100/60 system. 3P 100A 300V + 2P 20A 300V with ground. Supplying power between main units and connecting them. Epoxy coating galvanized steel housing.



Knockout diameter

Side surface
38.8 dia. \times 1



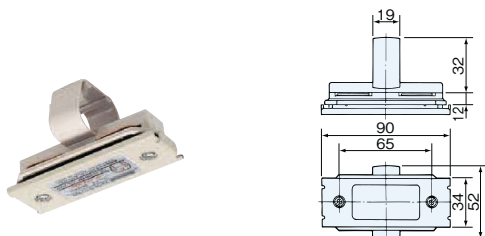
With 38mm ϕ pressure terminals

Cat. No.	Weight (kg)
DH2422	2.4

Product guide
(Plug lever is green.)

■Joiner (cream-gray finish) [Ⓟ]

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



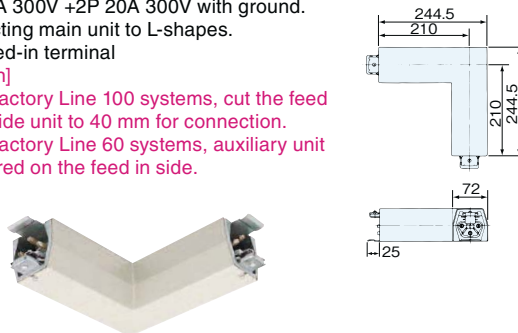
Cat. No.	Weight (kg)
DH2431	0.1

■Joiner L (Cream-gray finish)

For Factory Line 100/60 systems.
3P 100A 300V +2P 20A 300V with ground.
Connecting main unit to L-shapes.
With feed-in terminal

[Caution]

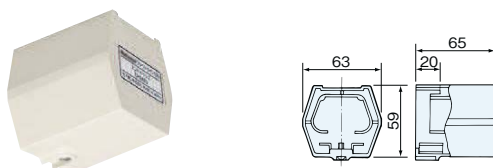
- ①For Factory Line 100 systems, cut the feed line side unit to 40 mm for connection.
- ②For Factory Line 60 systems, auxiliary unit required on the feed in side.



Cat. No.	Weight (kg)
DH85	1.85

■End cap (cream-gray finish)

For Factory Line 100/60 system.
Closing an end of the main unit.
Resin molding.



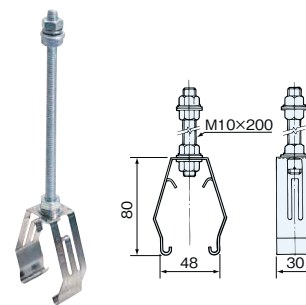
Cat. No.	Weight (kg)
DH2423K	0.06

■Hanger (with bolt)

For Factory Line 200, 100/60 system.
Suspending main unit from the building structure.
Stainless steel hanger and galvanized bolt (200mm).

[Caution]

Suspending weight must be below 20kg on each hanger.



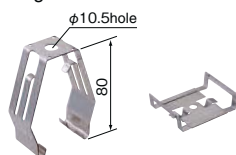
Cat. No.	Weight (kg)
DH2451	0.18

■Hanger (with earthquake resistant reinforcement fixtures)

For Factory Line 200, 100/60 systems.
Attaching main unit directly to the building structure or suspending with supplied bolts. Stainless steel hanger.

[Caution]

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



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.



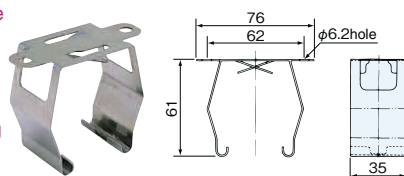
Cat. No.	Weight (kg)
DH2457	0.01

■Ceiling direct-mounting hanger

For Factory Line 200, 100/60 systems.
Mounting main unit directly to the ceiling.
Stainless steel hanger.

[Caution]

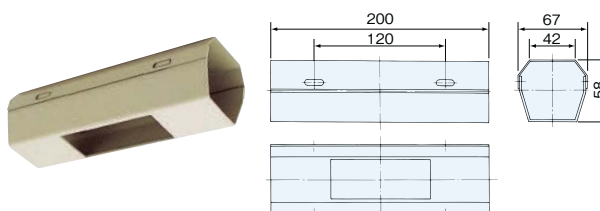
- ①Main unit cannot fasten directly to the building structure without using hangers.
- ②Suspending weight must be below 20kg on each hanger.



Cat. No.	Weight (kg)
DH2453	0.03

■Connection reinforcement fixture (cream-gray finish)

For Factory Line 200, 100/60 systems.
To keep straight the joint part of the main unit suspended by long bolts. Epoxy coating galvanized steel.



Cat. No.	Weight (kg)
DH2454	0.51

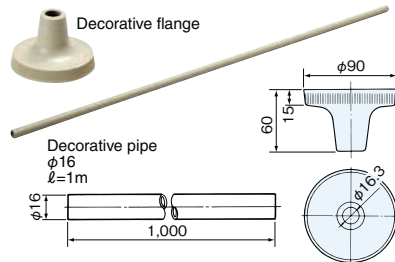
Decorative flange and pipe (cream-gray finish)

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

Hide the suspension bolt for good appearance.

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

Melamine coated steel pipe and ABS resin flange.



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

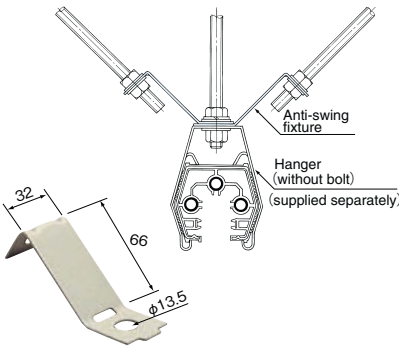
Anti-swing fixture (ivory-gray finish)

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

Prevent suspension bolts from swinging.

Use 2 pieces if secure both sides.

Epoxy coating galvanized steel.

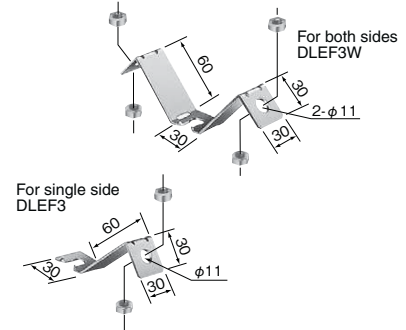


Cat. No.	Weight (kg)
DL741Y	0.1

Anti-swing fixture (electro-galvanized)

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

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

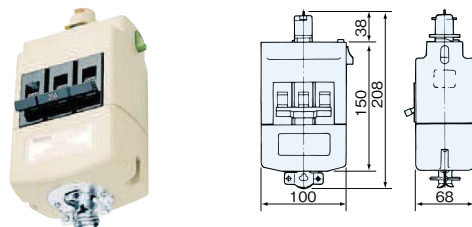


Cat. No.	Name	Bolt	Weight (kg)
DLEF3	For both sides	W3/8	0.07
DLEF3W	For single sides	W3/8	0.13

Terminal plugs with breaker (cream-gray finish)

For Factory Line 100/60 systems. 3P 20A/30A 200V with ground.

Power plug from the upper 3P conductors with Miniature Circuit Breaker. ABS resin housing.



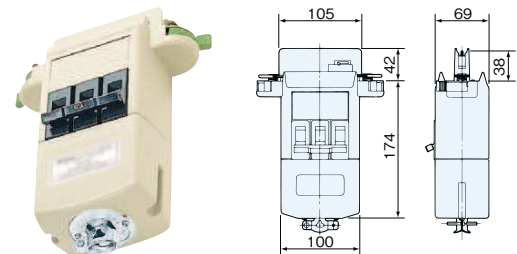
Cat. No.	Rating	Weight (kg)
DH2482K1	3P20A200V with ground	0.91
DH2483K1	3P30A200V with ground	

Terminal plugs with breaker (cream-gray finish)

For Factory Line 100/60 systems. 3P 60A 200V with ground.

Built-in breaker (60A: N-BAK-100)

Power plug from the upper 3P conductors with Miniature Circuit Breaker.



Cat. No.	Rating	Weight (kg)
DH2492K1	3P60A200V with ground	1.4

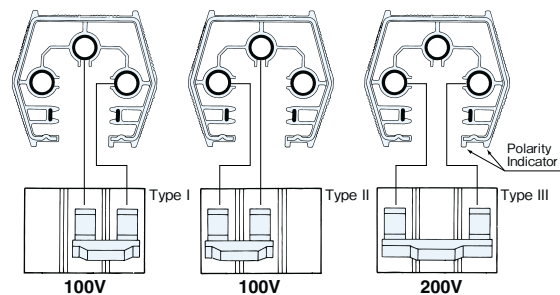
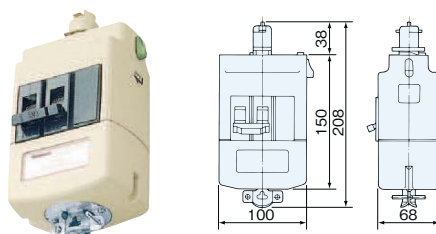
Terminal plugs with breaker (cream-gray finish)

For Factory Line 100/60 systems. 2P 20A/30A 200V with ground.

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

2P Power plug from the upper 3P conductors with Miniature Circuit Breaker.

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



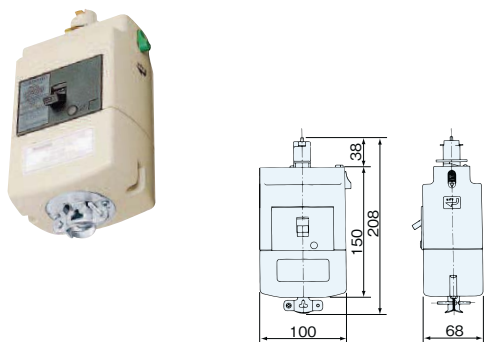
Consider the phase balance when selecting plugs.

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

Product guide
(Plug lever is green.)

■ Terminal plugs with leakage breaker (cream-gray finish)

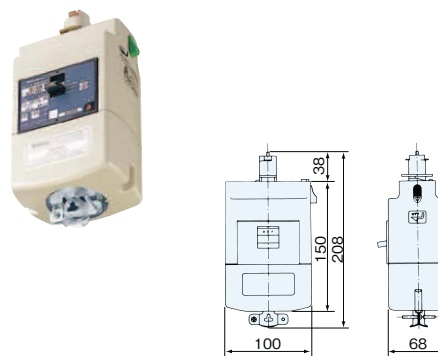
For Factory Line 100/60 systems. 3P 20A/30A 200V with ground.
Built-in leakage breaker (BKW-50S)
Available in 2 types with differing current sensitivity and capacity for
Power plug from the upper 3P conductors with Miniature Circuit
Breaker.



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

■ Terminal plugs with motor breaker (cream-gray finish)

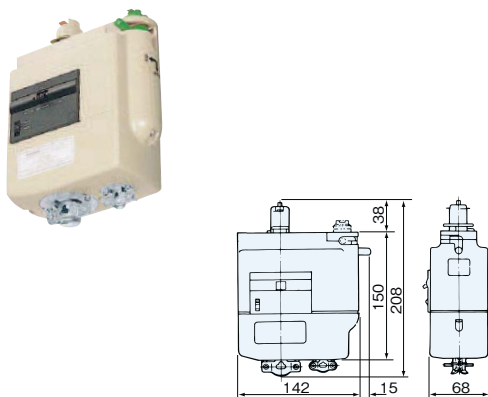
For Factory Line 100/60 systems. For 0.2 kW to 5.5 kW.
Built-in motor breaker (BBW-30CM)
Power plug from the upper 3P conductors with Miniature Circuit
Breaker.



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		

■ Terminal plug with a remote-control circuit breaker equipped (cream-gray finish)

For Factory Line 100/60 systems.
3P 20A 300V with ground.
3P 30A 300V with ground.
Built-in remote control breaker (100V operating voltage)
Terminal plug for the upper 3P circuit; can be turned on and off
remotely

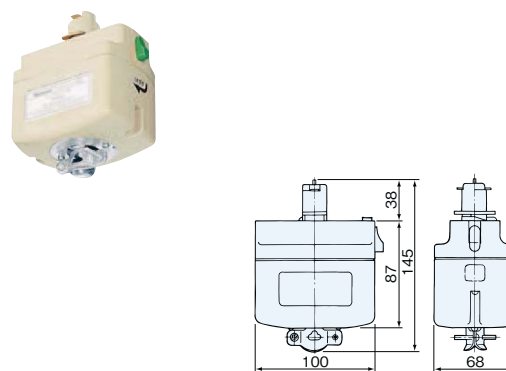


The remote operation switch is required separately.
(Use this product with 1a + 1a.)

Cat. No.	Rating	Weight (kg)
DH2485K1	2P20A200V with ground	1.4
DH2486K1	2P20A200V with ground	

■ Terminal plug A (cream-gray finish)

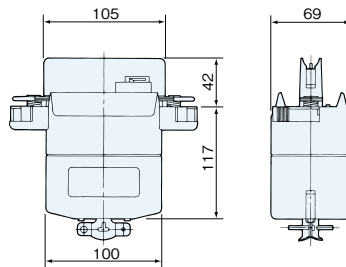
For Factory Line 100/60 systems. 3P 30A 300V with ground.
Power outlet for the main unit from the upper 3P conductors.
ABS resin housing.



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

Terminal plug A (cream-gray finish)

For Factory Line 100/60 systems. 3P 60A 300V with ground.
Power outlet from the upper 3P conductors.

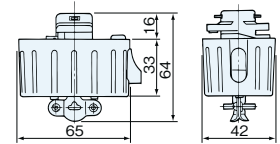


Cat. No.	Rating	Weight (kg)
DH2491	3P60A300V with ground	0.5

Terminal plug B (cream-gray finish)

JIS C 8366 ⚡ ⚡
For Factory Line 100/60 systems. 2P 15A 300V with ground.
Power plug from the lower 2P conductors.
ABS resin housing.

[Caution]
Cannot be used for Factory Line 30 because of the difference in the ground connection.

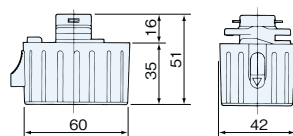


Cat. No.	Rating	Weight (kg)
DH2463	2P15A300V with ground	0.08

Locking plug socket (cream-gray finish)

JIS C 8366 ⚡ ⚡
For Factory Line 100/60 systems. Ground 2P 15A 125V Locking.
Locking outlet plug from lower 2P conductors.
(100V only)

[Caution]
Cannot be used for Factory Line 30 because of the difference in the ground connection.

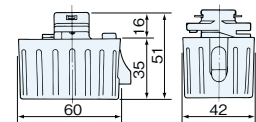


Cat. No.	Rating	Weight (kg)
DH2477	Ground 2P15A125V Locking	0.07

Plug Socket (cream-gray finish)

JIS C 8366 ⚡ ⚡
For Factory Line 100/60 systems. Ground 2P 15A 125V.
Plug socket from lower 2P conductors.
(100V only)

[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

Product guide
(Plug lever is green.)

Fluorescent lighting fixture plug

JIS C 8366 ⚡⚡

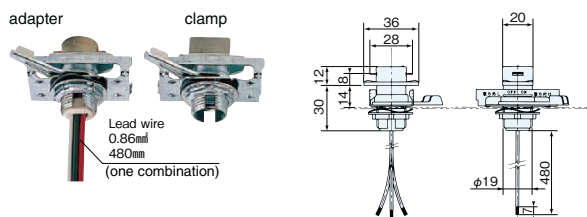
For Factory Line 100/60 system. 2P 6A 250V with ground.

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

Consists of clamp-feeder and clamp. Galvanized steel frame.

[Caution]

Weight must be below 20kg.



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

Cat. No.	Rating	Weight (kg)
DH2471	2P6A250V with ground	0.16

Reel-type plug socket

(Plug: Cream-gray finish. Socket: Off-white finish)

JIS C 8366 ⚡⚡

For Factory Line 100/60 systems. 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.

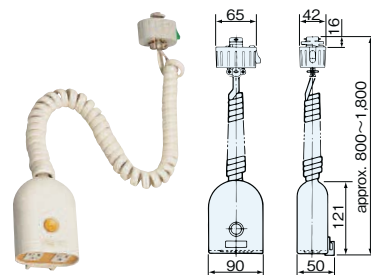
(100V only)

[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)
DH2462	For twin ground 2P15A125V	0.70
DH2464	For twin ground 2P15A125V locking	

Cord hook (cream-gray finish)

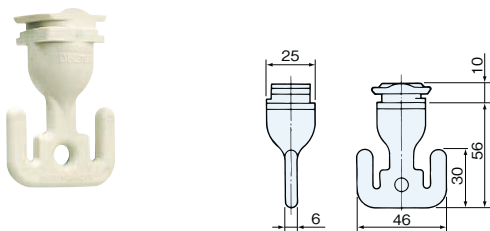
For Factory Line 100/60 and 30 systems.

Support wiring cables connected to the outlet plug.

Polly carbonate resin.

[Caution]

Suspending weight must be below 5kg on each hanger.



Cat. No.	Weight (kg)
DH2798	0.03

Factory Line 30

■ Factory Line 30 main unit ^(PS) (cream-gray finish: Munsell 5Y7.2/1.4)

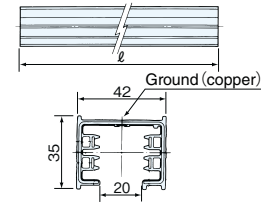
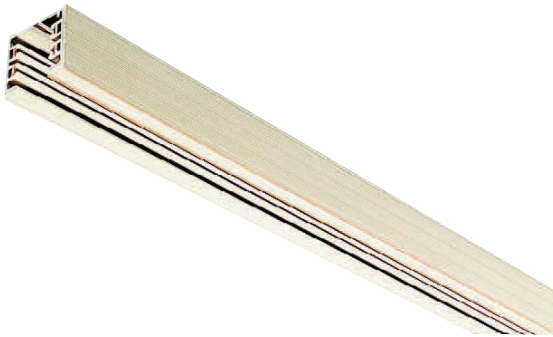
4P 30A 300V with ground.

Conductor equipped ducts for a 3-phase 3-wire circuit or a single phase 3-wire circuit or two single phase circuits.

Galvanized steel core PVC resin housing and copper conductors.

[Caution]

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



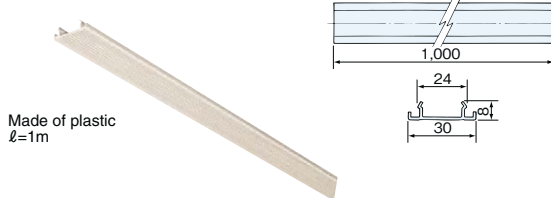
Cat. No.	Length ℓ (mm)	Weight (kg)
DH2711	1,000	1.6
DH2712	2,000	3.2
DH2713	3,000	4.8

■ Duct cover (cream-gray finish)

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

Protect from entering foreign bodies or dusts into main unit.

Length 1m. Made of PVC resin.



Cat. No.	Weight (kg)
DH2799	0.06

■ Feed-in cap (cream-gray finish) ^(PS)

For Factory Line 30 system.

4P 30A 300V with ground.

Supplying power at an end of the main unit.

Galvanized steel and resin housing.



Cat. No.	Weight (kg)
DH2721	0.16

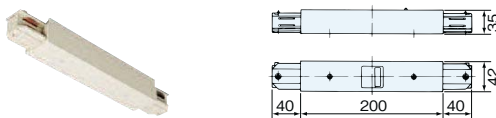
■ Center feed-in joiner (cream-gray finish) ^(PS)

For Factory Line 30 system. 4P 30A 300V with ground.

Supplying power between main units and connecting them.

Galvanized steel and resin housing.

[Caution] Use same cables as a power line to connect terminals.



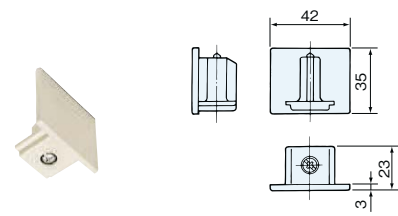
Cat. No.	Weight (kg)
DH2722	0.24

■ End cap (cream-gray finish) ^(PS)

For Factory Line 30 system.

Closing an end of the main unit.

Resin molding.



Cat. No.	Weight (kg)
DH2723	0.01

■ Joiner (cream-gray finish) ^(PS)

For Factory Line 30 system.

4P 30A 300V with ground. Connecting main units both physically and electrically.

Resin molding. Cannot supply power with this part.



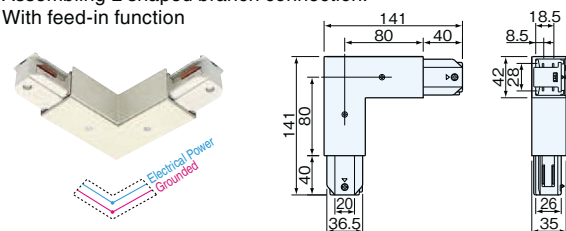
Cat. No.	Weight (kg)
DH2731	0.08

■ L joiners (cream-gray finish) ^(PS)

For Factory Line 30 system. 4P 30A 300V with ground.

Assembling L-shaped branch connection.

With feed-in function



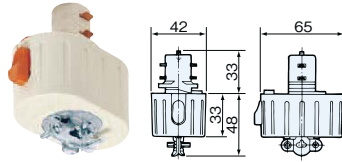
Cat. No.	Weight (kg)
DH2732	0.37

Product guide
(Plug lever is orange.)

■Terminal plug (cream-gray finish) ^(PS)

For Factory Line 30 system. 2P/3P/4P 15A 300V with ground.
Power outlet for the main unit. "L"(for the upper 2P conductors)
and "S"(for the lower 2P conductors) plug are available in 2P type.
Urea resin molding.

[Caution]
Cannot be used with Factory
Line 100/60 systems.

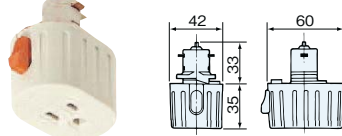


Cat. No.	Name	Rating	Weight (kg)
DH2781	2PS	2P15A300V with ground	0.08
DH2782	2PL	2P15A300V with ground	
DH2783	3P	3P15A300V with ground	
DH2784	4P	4P15A300V with ground	

■Plug Socket (cream-gray finish) ^(PS)

For Factory Line 30 systems. Ground 2P 15A 125V.
Used 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.

[Caution]
Cannot be used with
Factory Line 100/60
systems.



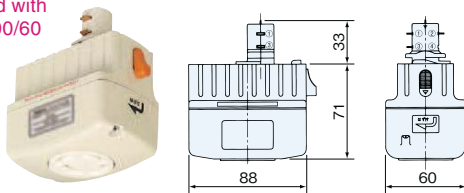
Cat. No.	Type	Rating	Weight (kg)
DH2773	S	Ground 2P15A125V	0.05
DH2774	L		

■Hooked Plug Socket (cream-gray finish) ^(PS)

For Factory Line 30 system. Ground 3P 20A 250V.
With ground 3P 20A hooked socket (WF2420WK)
The socket □ shown in the figure below is also available to order.



[Caution]
Cannot be used with
Factory Line 100/60
systems.



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

■Fluorescent lighting fixture plug ^(PS)

For Factory Line 30 system. 2P 6A 300V with ground.
Mounting a fluorescent lighting fixture directly to the main
unit and supply power from upper or lower 2P conductors.
Consists of clamp-feeder and cramp.
Galvanized steel frame.

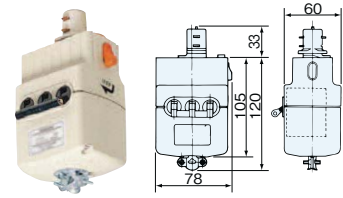
[Caution] Weight must be below 20kg.



■Terminal plugs with circuit protector (CP) ^(PS) (cream-gray finish)

For Factory Line 30 system. 3P 15A 250V with ground.
Built-in circuit protector (CP-A)
Used for extracting 3-phase power.

[Caution]
Cannot be used with Factory
Line 100/60 systems.

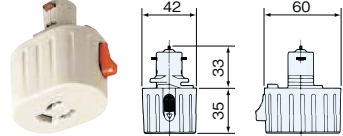


Cat. No.	Rating	Weight (kg)
DH2785	3P15A250V with ground	0.35

■Locking plug socket (cream-gray finish) ^(PS)

For Factory Line 30 system. Ground 2P 15A 125V Locking.
Used 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.

[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		

■Reel-type plug socket (Plug: Cream-gray finish. Socket: Off-white finish) ^(PS)

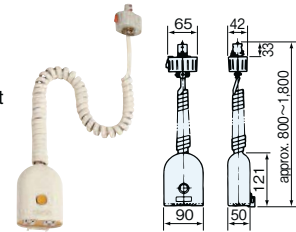
For Factory Line 30 system. For twin ground 2P 15A 125V, twin
ground 2P 15A 125V locking.

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 □ from the duct
available to order.
"L" (for the upper conductors) and
"S" (for the lower conductors)
plug are available.

[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)
DH2775	S	For twin ground 2P15A125V	0.73
DH2776	L		
DH2778	S	For twin ground 2P15A125V locking	
DH2779	L		

■ Pipe suspension hanger (cream-gray finish)

For Factory Line 30 system.

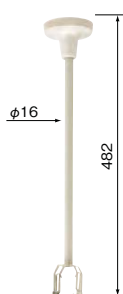
Suspending main unit.

The pipe can be cut at the flange side.

Melamine coated steel pipe and ABS resin flange. Maximum suspension interval is 1.5m.

[Caution]

Suspending weight must be below 10kg on each hanger.



Cat. No.	Weight (kg)
DH2750	0.31

■ Hanger (with bolt)

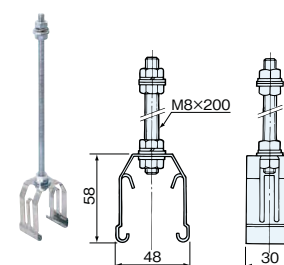
For Factory Line 30 system.

Suspending main unit from the building structure.

Stainless steel hanger and galvanized bolt (200mm).

[Caution]

Suspending weight must be below 10kg on each hanger.



Cat. No.	Weight (kg)
DH2751	0.11

■ Hanger (with earthquake resistant reinforcement fixture)

For Factory Line 30 system. Suspending main unit directly from the building structure, or when the hanger bolts (ℓ=200) are insufficient.

Stainless steel hanger

[Caution]

- ①Suspending weight must be below 10kg on each hanger.
- ②Main unit cannot fasten directly to the building structure without using hangers.
- ③When 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 500 mm. Stainless steel hanger.



Cat. No.	Weight (kg)
DH2757	0.01

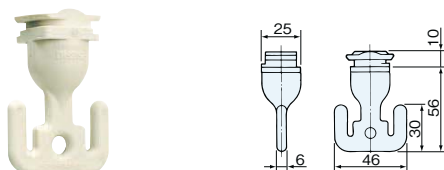
■ Cord hook (cream-gray finish)

For Factory Line 100/60 and 30 systems.

Support wiring cables connected to the outlet plug.

Polly carbonate resin.

[Caution] Suspending weight must be below 5kg on each hanger.



Cat. No.	Weight (kg)
DH2798	0.03

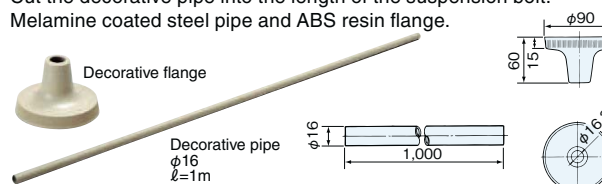
■ Decorative flange and pipe (cream-gray finish)

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

Hide the suspension bolt for good appearance.

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

Melamine coated steel pipe and ABS resin flange.

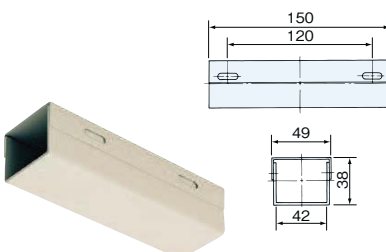


Cat. No.	Name	Weight (kg)
DH2455	Decorative flange	0.10
DH2456	Decorative pipe	0.47

■ Connection reinforcement fixture (cream-gray finish)

For Factory Line 30 systems.

To keep straight the joint part of the main unit suspended by long bolts. Epoxy coating galvanized steel.



Cat. No.	Weight (kg)
DH2754	0.36

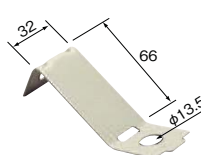
■ Anti-swing fixture (ivory-gray finish)

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

Prevent suspension bolts from swinging.

Use 2 pieces if secure both sides.

Epoxy coating galvanized steel.

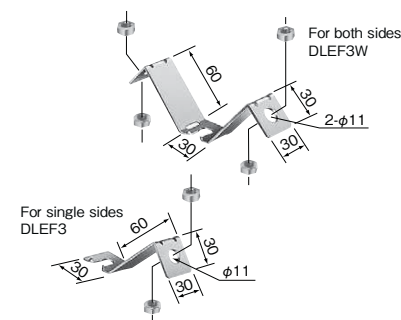


Cat. No.	Weight (kg)
DL741Y	0.1

■ Hanger bolt anti-swing fixture (electro-galvanized)

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

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



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

Factory Line 20

■Factory Line 20 main unit (cream-gray finish: Munsell 5Y7.2/1.4)

2P 20A 125V with ground. JIS C 8366 ⚡Ⓢ

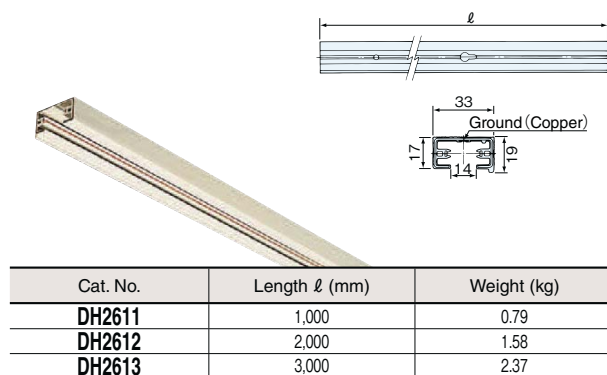
Conductor equipped ducts for a single phase circuit.

Galvanized steel core PVC

resin housing and copper conductors.

[Caution]

Do not attach the plug unit with the place where the tapping screw were mounted.

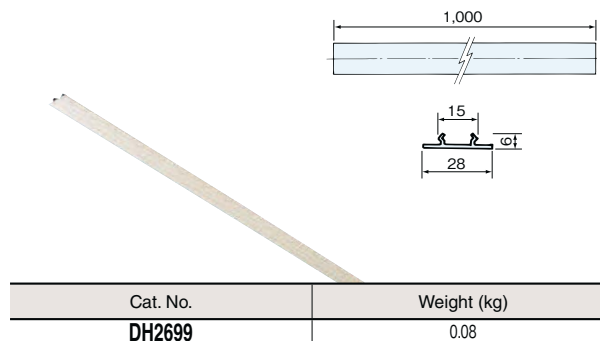


■Duct cover (cream-gray finish)

For Factory Line 20 system.

Closing the main unit opening to protect from entering foreign bodies or dusts into main unit.

Length 1m. Made of PVC.



■Feed-in cap (cream-gray finish)

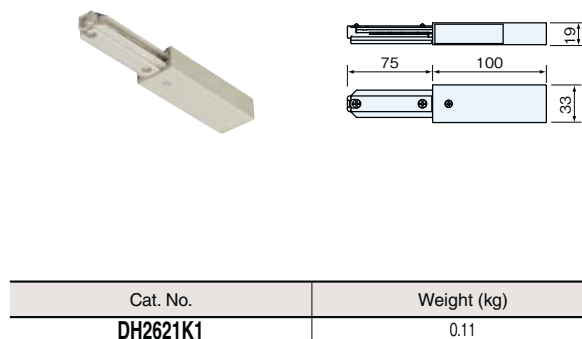
JIS C 8366 ⚡Ⓢ

For Factory Line 20 system. 2P 20A 125V with ground.

Supplying power at an end of the main unit.

Internal quick connect terminals for single core wire.

Galvanized steel and resin housing.



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

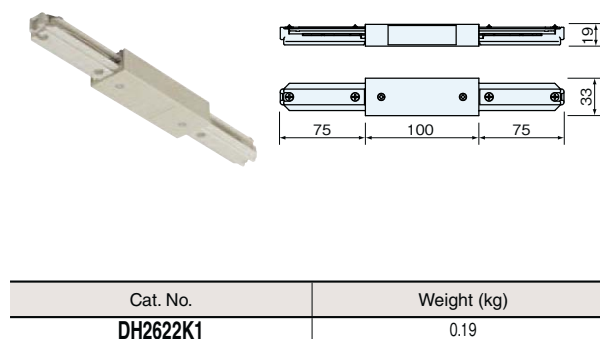
JIS C 8366 ⚡Ⓢ

For Factory Line 20 system. 2P 20A 125V with ground.

Supplying power between main units and connecting them.

Internal quick connect terminals for single core wire.

Galvanized steel and resin housing.



■End cap (cream-gray finish)

JIS C 8366 ⚡Ⓢ

For Factory Line 20 system.

Closing an end of the main unit.

Resin molding.



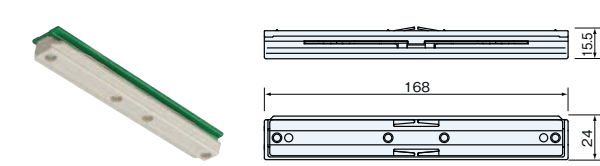
■Joiner (cream-gray finish)

JIS C 8366 ⚡Ⓢ

For Factory Line 20 system. 2P 20A 125V with ground.

Connecting main units both physically and electrically.

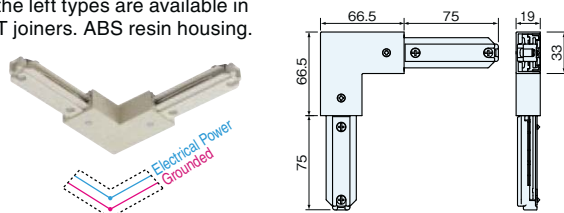
Resin molding. Cannot supply power with this part.



■ L joiners (with feed-in terminal) (cream-gray finish)

JIS C 8366 ⚡ Ⓟ

For Factory Line 20 system. 2P 20A 125V with ground. Assembling L, T and or X configurations. According to the polarity, the right and the left types are available in T joiners. ABS resin housing.

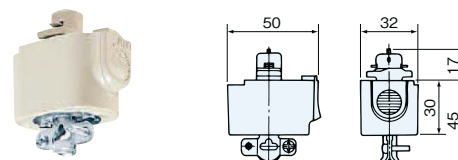


Cat. No.	Weight (kg)
DH2632K1	0.19

■ Terminal plug (with ground) (cream-gray finish)

JIS C 8366 ⚡ Ⓟ

For Factory Line 30 system. 2P 15A 125V with ground. Power outlet for the main unit. Urea resin molding.



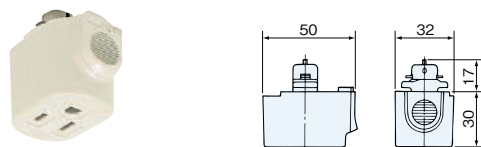
Cat. No.	Rating	Weight (kg)
DH2683	2P15A125V with ground	0.05

■ Plug sockets (with ground) (cream-gray finish)

JIS C 8366 ⚡ Ⓟ

Ground 2P 15A 125V.

Use for extracting single-phase 100V socket power.



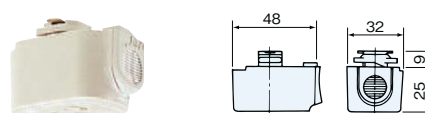
Cat. No.	Rating	Weight (kg)
DH2670	Ground 2P15A125V	0.04

■ Locking plug socket (cream-gray finish)

JIS C 8366 ⚡ Ⓟ

Ground 2P 15A 125V.

Use for extracting single-phase 100V socket power.



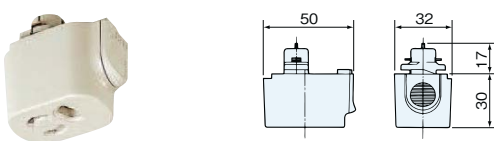
Cat. No.	Rating	Weight (kg)
DH2671	2P15A125V with ground	0.04

■ Locking plug socket (with ground) (cream-gray finish)

JIS C 8366 ⚡ Ⓟ

Ground 2P 15A 125V Locking.

Use for extracting single-phase 100V socket power.



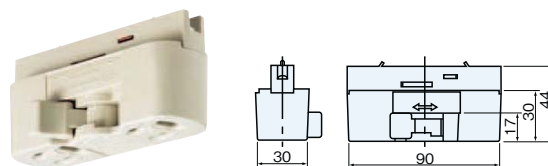
Cat. No.	Rating	Weight (kg)
DH2684	Ground 2P15A125V Locking	0.04

■ 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)
DH2686	For twin ground 2P15A125V locking	0.1

■ Reel-type plug socket Ⓟ (Plug: Cream-gray finish. Socket: Off-white finish)

Twin 2P 15A 125V.

Can be lowered to hand level (max. 1.8m from the duct).

Lowering up to 3m (U) 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)
DH2676	Twin 2P15A125V	0.69

■ Reel-type plug socket (with ground) Ⓟ (Plug: Cream-gray finish. Socket: Off-white finish)

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

Can be lowered to hand level (max. 1.8m from the duct).

Lowering up to 3m (U) 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)
DH2675	For twin ground 2P15A125V	0.7
DH2677	For twin ground 2P15A125V locking	

Fluorescent lighting fixture plug

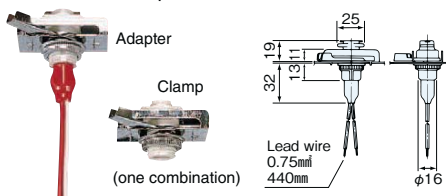
JIS C 8366 (P)

For Factory Line 20 system. 2P 6A 250V with ground.

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

Galvanized steel frame.

[Caution]
Weight must be below 10kg.



Cat. No.	Rating	Weight (kg)
DH2672	2P6A125V	0.13

Pipe suspension hanger (cream-gray finish)

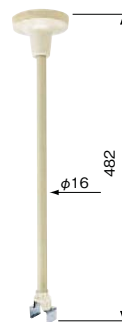
For Factory Line 20 system.

Suspending main unit.

The pipe can be cut at the flange side. Maximum suspension interval is 1.5m.

Melamine coated steel pipe and ABS resin flange.

[Caution]
Suspending weight must be below 10kg on each hanger.



Note: The hanger fixture alone is a special order item.

Cat. No.	Weight (kg)
DH2650	0.31

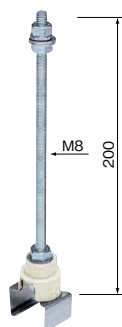
Hanger (with bolt)

For Factory Line 20 system.

Suspending main unit from the building structure.

Stainless steel hanger and galvanized bolt (200mm).

[Caution]
Suspending weight must be below 10kg on each hanger.



Cat. No.	Weight (kg)
DH2651	0.13

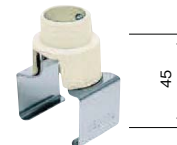
Hanger (without bolt)

For Factory Line 20 system.

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

Stainless steel hanger.

[Caution]
Suspending weight must be below 10kg on each hanger.



Cat. No.	Weight (kg)
DH2652	0.03

Hanging hook (cream-gray finish)

For Factory Line 20 system.

Hooking something on the Factory Line 20 main unit.

[Caution]
Suspending weight must be below 5kg on each hanger.



Cat. No.	Weight (kg)
DH2698	0.01

Poster clip (cream-gray finish)

For Factory Line 20 system.

Suspending document or sheet to the Factory Line 20 main unit.

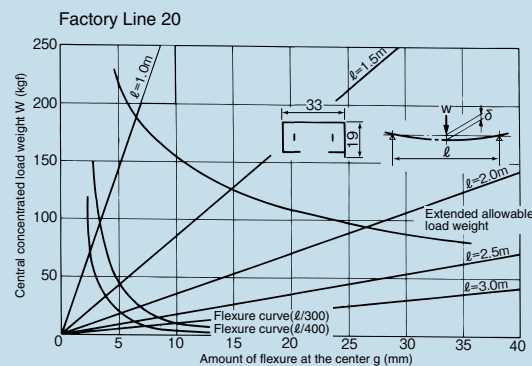
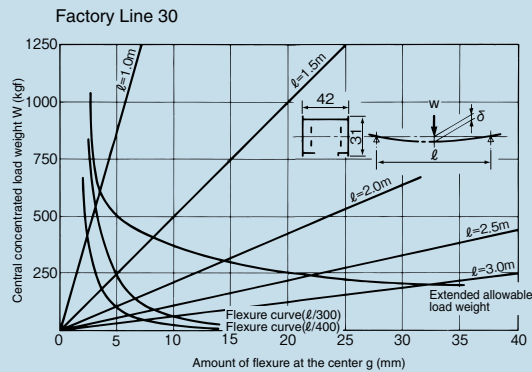
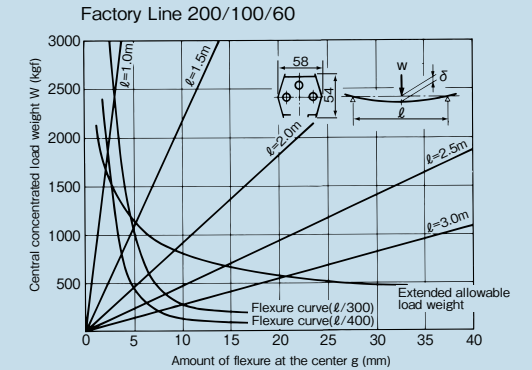
[Caution]
Suspending weight must be below 5kg on each hanger.



Cat. No.	Weight (kg)
DH2697	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 Ω/m)			Voltage drop between wires (V/m)						
			AC resistance (R)	Reactance (X)	Impedance (Z)	cosθ=1.0	0.9	0.8	0.7	0.6	0.5	0.4
400	3φ3W	50	0.125	0.174	0.217	0.087	0.115	0.120	0.120	0.119	0.116	0.111
		60		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 Ω/m)			Voltage drop between wires (V/m)						
			AC resistance (R)	Reactance (X)	Impedance (Z)	cosθ=1.0	0.9	0.8	0.7	0.6	0.5	0.4
200	1φ2W	50	0.242	0.101	0.262	0.097	0.105	0.102	0.097	0.090	0.083	0.076
	1φ3W	60		0.121	0.271	0.097	0.108	0.106	0.102	0.097	0.090	0.083
	3φ3W	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

〈Factory Line 100〉

● 3P 100A 440V

Rated current (A)	Electrical system	Frequency (Hz)	Electrical characteristics (10 ⁻³ Ω/m)			Voltage drop between wires (V/m)						
			AC resistance (R)	Reactance (X)	Impedance (Z)	cosθ=1.0	0.9	0.8	0.7	0.6	0.5	0.4
100	1φ2W	50	0.525	0.168	0.551	0.105	0.109	0.104	0.097	0.090	0.082	0.073
	1φ3W	60		0.201	0.562	0.105	0.112	0.108	0.102	0.095	0.087	0.079
	3φ3W	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

● 2P 20A 250V

20	1φ2W	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 440V

Rated current (A)	Electrical system	Frequency (Hz)	Electrical characteristics (10 ⁻³ Ω/m)			Voltage drop between wires (V/m)						
			AC resistance (R)	Reactance (X)	Impedance (Z)	cosθ=1.0	0.9	0.8	0.7	0.6	0.5	0.4
60	1φ2W	50	1.017	0.168	1.031	0.122	0.119	0.110	0.100	0.090	0.079	0.067
	1φ3W	60		0.201	1.037	0.122	0.120	0.112	0.103	0.092	0.082	0.071
	3φ3W	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

● 2P 20A 250V

20	1φ2W	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 440V

Rated current (A)	Electrical system	Frequency (Hz)	Electrical characteristics (10 ⁻³ Ω/m)			Voltage drop between wires (V/m)						
			AC resistance (R)	Reactance (X)	Impedance (Z)	cosθ=1.0	0.9	0.8	0.7	0.6	0.5	0.4
30	1φ2W (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
	1φ2W (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
		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

〈Factory Line 20〉

● 2P 20A 250V

Rated current (A)	Electrical system	Frequency (Hz)	Electrical characteristics (10 ⁻³ Ω/m)			Voltage drop between wires (V/m)						
			AC resistance (R)	Reactance (X)	Impedance (Z)	cosθ=1.0	0.9	0.8	0.7	0.6	0.5	0.4
20	1φ2W	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

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