

6. Instruction for wiring cables into cable carriers

■ Cable for cable carrier

Please refer to the Movable cable and cord selection table.

■ Cable carrier selection

1) Cable carrier's permissible bending radius

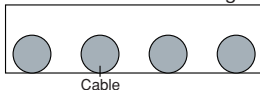
The permissible bending radius of cable carrier recommend for based on 7.5 times the outside diameter of cable wired into the cable carrier or more.

2) Cable carrier's width

The width of cable carrier should be such that when cables are horizontally arranged in the cable carrier, sufficient space is provided between the cables.

A flat wiring with sufficient space, you can prevent it from frequently interfering with other cables.

■ Each cable has enough space



3) Cable carrier's inner partition

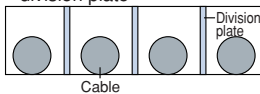
Cable carrier should be provided with as many inner partitions as possible to allow cables and/or hoses wired into the cable carrier to be separated from one another.

By providing a division plate to prevent mixed wiring in which cables interfere with each other, the characteristics of each cable can be fully exhibited.

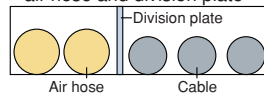
In addition, by wiring the cable and air hose separately, you can prevent the cable from being crushed by the air hose, etc., and you can use the cable for a longer time.

(Ideally with a partition put between the cables and a partition between the cable and air hose.)

■ Each cable is divided in a division plate



■ Cable is distributed in on air hose and division plate



4) Cable carrier's cable space factor

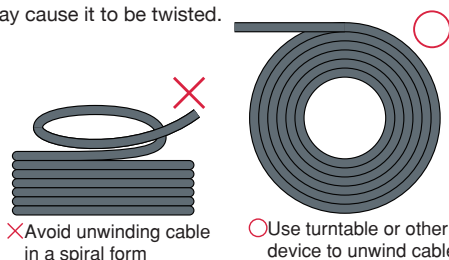
Set the space factor with a margin (30% or less) so that the cable do not interfere with each other or the wall surface of the cable carrier in the cable carrier.

■ Precautions for cable wiring

1) Precaution against cable twist

• During cable cutting

When unwinding cable from a spool, avoid pulling it in a spiral form, which may cause it to be twisted.



✗ Avoid unwinding cable in a spiral form

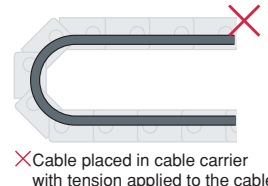
○ Use turntable or other similar device to unwind cable

• During cable connection

When unwinding cable from a spool, extend it in a straight line to straighten it, making sure that it is free from twists before wiring it properly. (Using the printed marking on it as a guide for its proper connection.)

2) Precaution against cable tension

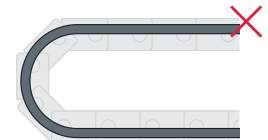
When placing cable in cable carrier, take precautions against tension to the cable, which may it to be stretched in the cable carrier, resulting in the cable's sheath being shaved by the cable carrier's inner wall.



✗ Cable placed in cable carrier with tension applied to the cable

3) Precaution against excessive cable slackness

When placing cable in cable carrier, take precautions against excessive slackness of the cable in the cable carrier, which may cause the cable to have its sheath shaved by the cable carrier's inner wall or become entangled with other cable placed together in the cable carrier. To prevent such trouble, place the cable in the cable carrier by adjusting the length of the cable in the bent portion of the cable carrier so that it passes through the cable carrier's center in its height direction.



✗ Cable placed in cable carrier with excessive slackness in the cable



○ Cable placed in cable carrier in an ideal manner

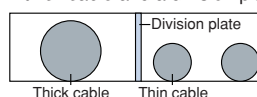
4) Precaution against cable fixation

When placing cable in cable carrier, take precautions against fixation of the cable in the cable carrier's movable portion with a cable ties or other similar devices, which may cause the cable's action of dispersing/absorbing its bending stress to be lost. Place cable in cable carrier, fixing the cable at both ends of the cable carrier, at which it is immobile.

5) Precaution against contact between cables significantly different in outside diameter

When placing thin and thick cables (significantly different in outside diameter) together in cable carrier, take precautions against contact between the cables, which may cause the thin cable to be pressed by the thick cable, resulting in breakage of the former. To prevent such trouble, place thin and thick cables together in cable carrier with a partition put between the thin and thick cables.

■ Thin cable is distributed in thick cable and a division plate



Thick cable Thin cable