Wiring point of movement for cable

Wiring method is important to devise improvement of the service life of the movement for cable and to become stabilized. We propose a wiring point to you to use sufficiently excellent movement characteristics of our movement for the cable.

1. Common items

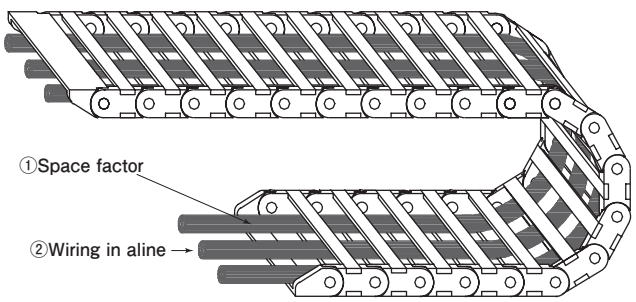
Wiring point :Example U-shaped folded portion.

①Allowable bending radius.....6D or more※D represents the cable outer diameter
②Allowable moving tension.....conductor cross-sectional area 1 ㎟ per 19.6N below
③Cable fixed part.....tightening diameter, -0.2 to 0.5mm
④Guide diameter and tube diameter.....1.2～1.3D
⑤Other

a) preventing the twist of the cable
b) Hydraulic, the air hose, may not wire simultaneously as much as possible. Unavoidably If you want to bracket, you have to consider the curing or expansi on part.
c) Bundling in moving parts, it is not performed as much as possible.
d) When insert a plurality of cables to the flexible pipe or the like, the space factor is 40% or less, the variation in the length of the cable i s small.
e) When winding the spiral tube on a cable is to select the inner diameter size enough not tighten the cable

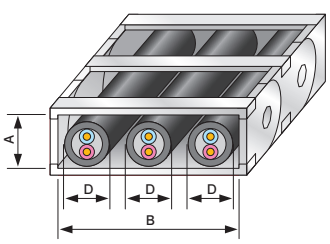
2. Using a drag chain

Except for the common item, in order to avoid mutual interference between the cable please note the following items.



①Space factor··· ·····30% or less

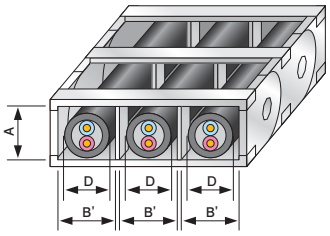
About calculation method of the space factor



To explain the left as an example figure, In theory it becomes like the following.

$$\text{Space factor}(\%) = 3 \times \frac{\pi D^2}{4} \div (A \times B) \times 100$$

If you want to wire to the drag chain, it is impossible to wire at the center of the cable track, please wire with about 30% of the margin for the cable outer diameter.
It is.
(A= 1.3D, B = 3 x 1.3D is lowest effective space)
However, if there is a partition in the drag chain and it is possible to fixed, It can be wired to nearly medium.



$$\text{Space factor becomes } \frac{\pi D^2}{4} \div (A \times B') \times 100$$

②Wiring in aline··· ... It is possible to wire in line.