

Product introduction

It is suitable for use in the occasion of reciprocating motion. It can play a role of traction and protection for the built-in cables, oil pipes, gas pipes, water pipes, etc. Each section of the dray chain can be opened for easy installation and maintenance. Low noise during exercise, wear-resistant, high-speed movement. Dray chains have been widely used in CNC machine tools, electronic equipment, stone machinery, glass machinery, door and window machinery, injection molding machines, manipulators, lifting and transportation equipment, and automated warehouses.

Selection of installation space for energy chains

1. Determine internal dimensions

The load, quantity, and diameter of cables, air pipes, and hydraulic pipes determine the internal size and distribution of the dray chain. The load distribution inside the dray chain should be reasonably and evenly distributed: including the reasonable distribution of weight and space.

- ①The inner width and inner height of the energy chain are usually 1.5 times the maximum width and height of the pipeline arrangement;
- ②It is recommended to use separators to isolate and arrange when there are different types, large number of pipelines, and large differences in diameter and load;
- ③Decide whether to choose fully enclosed e-chains (dust, chips, etc.) according to the use environment.

2. Calculate the bending radius

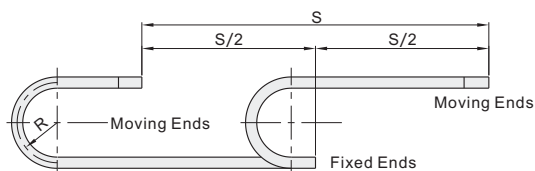
The selection of the bending radius depends on the following two factors:

- ①Under normal circumstances, the maximum diameter or thickness and the hardest pipeline determine the minimum bending radius of the dray chain;
- ②The installable space determines the allowable bending radius (in the case of limited installation space).
- Cable: The bending radius of domestic cables is 8 to 10 times its maximum outer diameter, and the imported cables are about 6 times;
- Air pipe / oil pipe / water pipe: 10 ~ 12 times the maximum outer diameter of the pipeline;
- Actual installation height HF: the actual reference value of the bending space of the dray chain.

The relationship between the length of the dray chain and the stroke

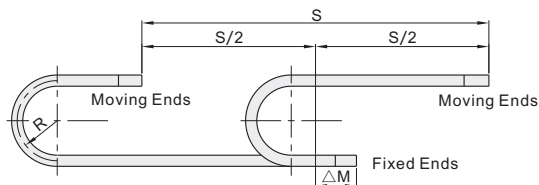
Stroke S: refers to the maximum distance that the moving end of the dray chain can move. The fixed end in the center of the stroke is the best solution, and the shortest length of the dray chain is selected.

The formula $LK = S/2 + K$ is suitable for all applications where the fixed end is located in the center of the stroke, except for rotating and long stroke movement.

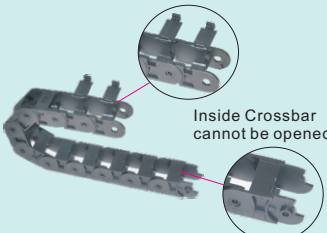
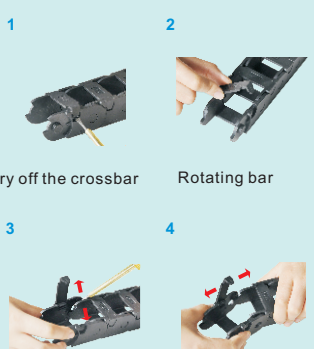
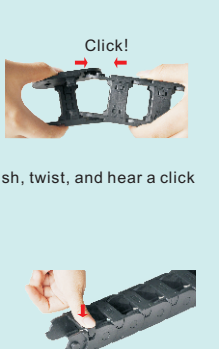
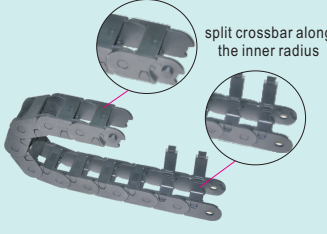
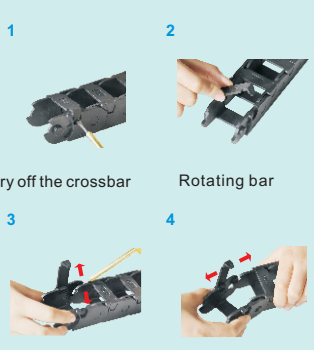
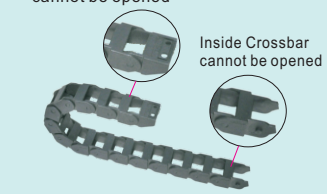


LK = Chain Length
 S = Stroke
 R = Bending Radius
 ΔM = Offset distance
 $K = \pi \times R + (2 \sim 4) \times P$

$LK = S/2 + \Delta M + K$ The formula is suitable for all applications where the fixed end is not in the center of the stroke.



■ Cable Carriers disassembly and assembly Example

Open Mode	Crossbar	Legend	Disassembly example	Assembly example
split crossbar along the outer radius	Bridge	split crossbar along the outer radius Inside Crossbar cannot be opened 	1 Pry off the crossbar 2 Rotating bar 3 Loosen the side links 4 Twist and pull away 	1 Click! Push, twist, and hear a click 2 Push down to snap 
split crossbar along the inner radius	Bridge	outside Crossbar cannot be opened split crossbar along the inner radius 	1 Pry off the crossbar 2 Rotating bar 3 Loosen the side links 4 Twist and pull away 	1 Click! Push, twist, and hear a click 2 Push down to snap 
Non-Openable	Bridge	outside Crossbar cannot be opened Inside Crossbar cannot be opened 	1 Click! Twist and pull away 	2 Click! Push, twist, and hear a click 