

Cable Drag Chains

SIMBAL Cable Chains

Introduction

Cable drag chains are available in a large range of sizes and provide the perfect solution in applications where it is required to provide power, and / or control signals to moving machinery. Cable chains are particularly effective in applications where space is at a premium or where there is no overhead structure to support a traditional festoon system.

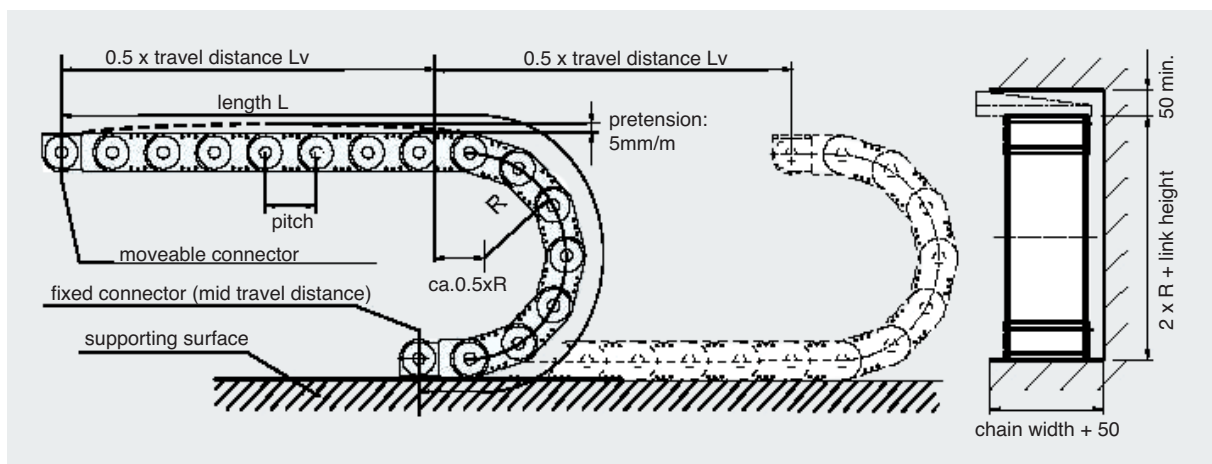
At SIMBAL we offer a full range of cable chains in both plastic and steel construction, we can also provide galvanised steel tray to carry the chains where required. Due to the constant bending, it is recommended always to use specially designed robotics cables in cable chains, details of the correct cables can be found in the cable section of this catalogue under the headings 'Robotflex', 'Robotflex screened' & 'Robotflex twisted pairs'. The Robotflex range are highly flexible all polyurethane sheath cables, for very light duty applications a less expensive PVC based cable is available on request.



The following rules should be followed when selecting a cable chain:

- Always allow a clearance of at least 10% for cables & 20% for hoses when calculating cable size
- Bend radius should always be sufficient to accommodate the minimum bending radius of the largest cable - normally 10 x cable diameter
- The length of the chain can be calculated as follows: $L = \text{Travel distance}/2 + 4 \times \text{Radius}$ (this assumes the chain is anchored at the centre of the travel distance)
- Width of chain is dependant on the number and size of the cables or hoses to be carried, with slow travelling applications cables can be installed on top of one another - separators are available to keep cables apart where required
- Connectors depend on the application and the chain type

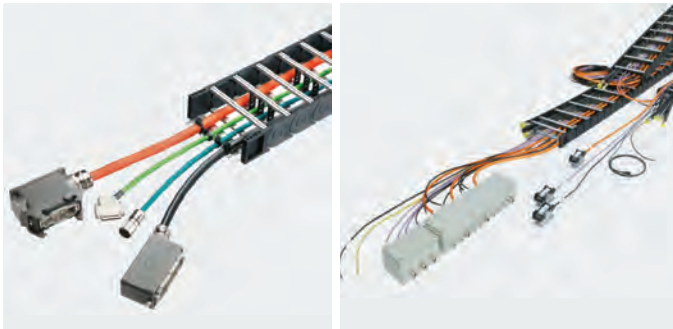
Shown below is a typical chain assembly.



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Complete assemblies can be provided with cables pre-mounted and also fitted with plug and socket terminations if required.



Standard chains are available manufactured from either plastic or galvanised steel, stainless steel chains are also available for special applications.

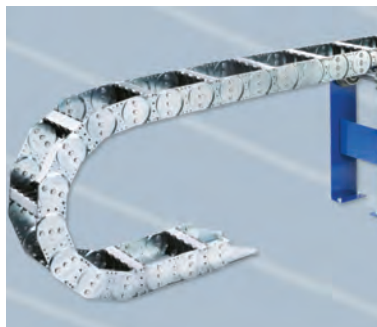
Horizontal Application

Chains are available in a huge range of types and sizes for feeding horizontal travelling machines.



Vertical & Unsupported Applications

Chains are available for a diverse range of applications where vertical or non-linear travel is required.



Special Applications

The range of special applications for cable chains is almost infinite – please call us with your requirements.