

Typical C-Rail System

GENERAL LAYOUT • DEFINITIONS • DESCRIPTIONS • TERMS • SYMBOLS

SYSTEM IN STORED POSITION Flat cable shown. Round cable/hose similar.

MINIMUM STORAGE DISTANCE (SD)

Horizontal area required for storing system when fully retracted (loop depth is at maximum).

TOTAL SYSTEM LENGTH (SL)

Equal to total RAIL LENGTH (RL).

SL = RL

AT

ACTIVE TRAVEL DISTANCE (AT)

Maximum distance first moving carrier (Tow Trolley or Control Unit Trolley) moves from fully stored position to fully extended. Usable length of system.

LOOP DEPTH (LD)

Distance from top of C-rail track to bottom of cable loops.

CLEARANCE

Minimum 5" clearance should be maintained between bottom of loops and any fixed obstructions in total system length.

5.0" Min.

FIXED END (FE)

MOVING END (ME)

SYSTEM IN EXTENDED POSITION Flat cable shown. Round cable/hose similar.

C-RAIL

Roll formed galvanized steel track sections support entire system weight.

INTERMEDIATE TROLLEY

Traveling assembly to which the saddle is attached. Sized according to your input. Computer figures number required.

RUNNING GEAR

Wheels carrying trolleys. Selection based upon your input—weight carried, speed and acceleration of system and special environmental or other wear considerations.

HANGER BRACKET

Supports rail from ceiling or other overhead members. Places evenly along system.

END STOP

Secured inside E-Trak. Prevents control unit trolley from overtraveling.

TOW CHAINS

Steel chain towing connection between trolleys which transmit pulling forces as system extends.

COUPLER

Joins two sections of C-Trak. Side adjustable for precise alignment.

TOW TROLLEY

Traveling trolley linked with moving machine. Includes cable saddle or clip.

CABLE(S)

Flat or round.

CABLE CLAMP, SADDLE

Standard on all trolleys, clamp contains and secures cables/hoses to cable saddle.

CABLE CLAMP, LOOP

Clamp used at bottom of loop organizes cables and prevents cable "thrashing" when cable package consists of more than one cable.

END CLAMP

Solid attachment point for cable at fixed end of system. One per system.

CABLE SADDLE

Standard for all trolleys, this surface determines radius for cable. Saddle radius of must match or exceed cable's minimum bend radius

EXTRA CABLE-FIXED END (FC)

Cable required to reach from end clamp to junction box (FB).

FIXED CABLE TERMINATION (FB)

Junction box (terminal strips optional).

END CLAMP

One supplied on each control unit trolley.

CABLE GLANDS

Ordered separately, per number of cables coming into junction box.

CONTROL TROLLEY UNIT

Pre-engineered unit includes two rolling trolleys supporting E-rail section which holds junction box and end clamp. **Ideal for supporting pendant stations (extra).**

EXTRA CABLE-MOVING END (MC)

Cable required to reach from tow trolley to junction box (MB).

MOVING CABLE TERMINATION (MB)

OPTIONAL – See "fixed termination", left.

Track•Master™ ...Built to Last

Precision engineered components and high quality finishes make Gleason Track•Master Festoon Systems smooth running and long lasting.

Running Gear

Steel standard. Bronze or stainless steel available.

C-Rail

Galvanized Standard. Stainless steel optional on C40 systems.

Trolley Body

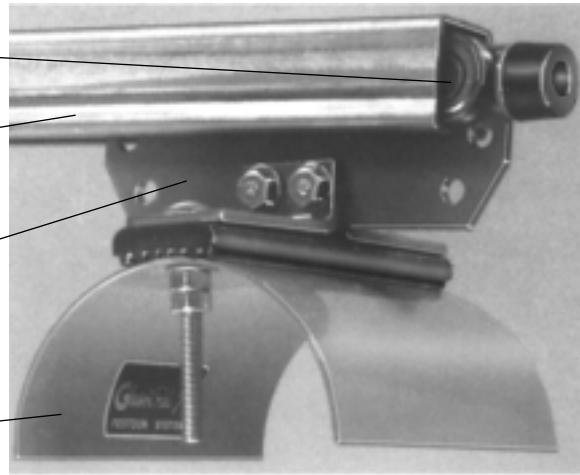
Standard finish is baked on orange polyester powder coating.

Saddle

For flat cable or mixed bundle. Standard finish is baked on orange polyester powder coating.

Clip

For hose or round cable. Standard finish is zinc plating.



Cable & Saddle Guidelines

1. Bending Cable (All saddles and clips)

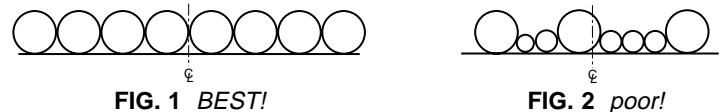
For good service and long life, it is best to follow the rule: "BIG BENDS ARE BEST". Cable producers vary in applying a multiplier. Gleason uses the chart below.

CABLE O.D..	MIN. RADIUS	MIN. SADDLE DIA.
Under 0.3 in.	3 x O.D	6 x O.D.
Under 0.5 in.	4 x O.D	8 x O.D.
Above 0.5 in.	5 x O.D	10 x O.D.



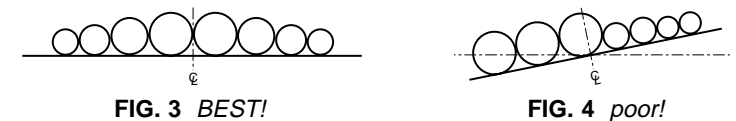
2. Cable O.D. Variations (Type M saddles)

Variations in cable size (O.D.) should be kept to a minimum. Clamp is most effective when all cables/hoses are the same O.D. or close as in figure 1. This ensures secure clamping. Wide variation in O.D. (Fig. 2) makes clamping difficult and cable/hose may not remain secure on the saddle.



3. Balance in Loading Cable (Type M saddles)

This is important for smooth running, long bearing life and component alignment. Distribute the load evenly, with the heaviest cables nearest the centerline.



4. Flat Cable Stacking (Type F saddles)

a) Secure Clamping

EXTREMELY IMPORTANT: At least 50% of the cable surface must be under clamp pressure.

b) Height Consideration

Flat cable stacking is best when width is 3 or 4 times height (Fig. 5 & 6, above). High stacking can work as long as equal pressure is applied to all cables (Fig. 8).

c) Configuration

BIG CABLE ON TOP (Fig. 9) provides maximum bending radius for largest cables, improves heat dissipation for power cables and transfers pulling force to largest cables when tow chains are not used.

