Heavy Duty
Crane and Hoist
Electrification Systems

(from 2002 catalog)
Current Carrying Capacity
Track rating: 175 amperes (continuous); 250 amperes (intermittent) or 225 amperes (continuous); 300 amperes (intermittent). Trolleys rated 175 or 225 amperes (continuous).

Voltage
600 volts A.C. — 250 volts D.C.

Track Supports
Supports are of heavy gauge steel. Two supports are required for each track section to provide support every five feet.

Track
Track sections consist of a brake pressed one-piece 13-gauge zinc coated steel housing and the enclosed current carrying bus bars and insulators, all factory assembled in convenient lengths ready for easy fool-proof installation on the job. The lower horizontal portions of the housing serve as smooth, rigid runways for the trolleys. Heavy Duty track sections are available in various types — Plain, Door, Sectionalizing, and Expansion track sections.

Bus bars are of hard drawn copper. They are amply proportioned to carry the specified current of 175 or 225 amperes per pole continuously, 250 or 300 amperes per pole intermittently, without over-heating.

Bus bar connectors assure full current carrying capacity across the joints without interfering with the free travel of the trolley contacts.

Insulators are made of a high insulating and arc-resistant material.

Trolleys
Basically, all Feedrail Heavy Duty trolleys have a chassis-insulator-contact assembly. The chassis is of heavy gauge steel. The trolley wheels and guide wheels are of the ball-bearing type. A substantially proportioned insulator block combines the best insulating properties with high arc resistance. Feedrail Heavy Duty trolleys are furnished with silver alloy BRUSH CONTACTS for movement up to 500 feet per minute. For rate of travel or conditions other than above please consult technical service group.

A polarizing tab on the chassis, operating in conjunction with a stop in the floor track section, permits insertion of the trolleys only one way. Equipment grounding may be made through the trolleys. Weights in excess of 40 pounds per trolley are not recommended.

Grounding
For the safety of personnel, the track casings of the Feedrail system may be used as an equipment grounding conductor for grounding equipment through the individual trolleys.

Equipment grounding may be made by using the grounding lug within the box. Track housing must be grounded through conduit or other suitable means.

Feedrail Heavy Duty Systems are designed primarily for indoor service in essentially dry locations. Feedrail systems are electrified tracks in which the current carrying components are enclosed in protective steel housings. Smooth riding internally track-supported trolleys take off current and provide electric power for crane and hoist or other types of electrification systems.

The Feedrail Heavy Duty Systems have been specifically developed to provide safe electrification for crane bridges, monorail-hoist installations, test lines, machine tools and similar applications.

The Feedrail Heavy Duty Systems are made up of standardized units, factory assembled for fast, complete installation without on-site fabrications.

Feedrail is listed by Underwriter’s Laboratories, Inc. (UL) under a CRANE AND HOIST ELECTRIFICATION SYSTEM (File E 31198).

For specific item listing currently in effect consult technical service group.
Plain Track

Continuous Rating: 175 Amperes or 225 Amperes — 600 volts A.C., 250 volts D.C.
Intermittent Rating, (1 minute off, 1 minute on) 250 Amperes or 300 Amperes — 600 volts A.C., 250 volts D.C.

Sections complete with Bus Bars.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Amperes</th>
<th>Poles</th>
<th>Length*</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>FH16500</td>
<td>175</td>
<td>2</td>
<td>10’</td>
<td>82 lbs</td>
</tr>
<tr>
<td>FH17500</td>
<td>175</td>
<td>3</td>
<td>10’</td>
<td>90 lbs</td>
</tr>
<tr>
<td>FH21500</td>
<td>225</td>
<td>2</td>
<td>10’</td>
<td>88 lbs</td>
</tr>
<tr>
<td>FH22500</td>
<td>225</td>
<td>3</td>
<td>10’</td>
<td>94 lbs</td>
</tr>
</tbody>
</table>

Sections without Bus Bars.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Length*</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>FH2130</td>
<td>10’</td>
<td>61 lbs</td>
</tr>
</tbody>
</table>

*10 feet is standard length. Shorter lengths furnished on special order.

Door Track

Door track sections are identical to plain track sections except with the addition of two hinged doors in the bottom for the insertion and removal of trolleys. When closed, the doors are securely locked and accurately aligned with the rest of the track to form an uninterrupted runway for the trolleys.

Sections complete with Bus Bars.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Amperes</th>
<th>Poles</th>
<th>Length*</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>FH16501</td>
<td>175</td>
<td>2</td>
<td>10’</td>
<td>83 lbs</td>
</tr>
<tr>
<td>FH17501</td>
<td>175</td>
<td>3</td>
<td>10’</td>
<td>91 lbs</td>
</tr>
<tr>
<td>FH21601</td>
<td>225</td>
<td>2</td>
<td>10’</td>
<td>87 lbs</td>
</tr>
<tr>
<td>FH22501</td>
<td>225</td>
<td>3</td>
<td>10’</td>
<td>95 lbs</td>
</tr>
</tbody>
</table>

Sections without Bus Bars.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Length*</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>FH2131</td>
<td>10’</td>
<td>62 lbs</td>
</tr>
</tbody>
</table>

*10 feet is standard length. Shorter lengths furnished on special order.

Hinged doors are easy to open or close. No tools are required. Pressing pins together against spring pressure releases locking bolts. Door openings are polarized so trolleys cannot be inserted in improper polarity.
Sectionalizing Track

Sectionalizing Track sections isolate portions of a track run. They are the same as Plain Track sections except near the center of the track each bus bar is interrupted by an air gap. The bus bars are so formed and positioned by a special insulator that all trolleys smoothly cross the air gap while maintaining electrical continuity. The circuits on both sides of the gap are momentarily tied together through the trolley contacts as the trolley passes the air gap.

Special Sectionalizing Track sections are made that do interrupt the current to the trolley. When used, these require two electrically connected trolleys to maintain current through the trolley at all times. They must not be used as a circuit interrupting device. Consult technical service group for details.

Sections complete with Bus Bars

<table>
<thead>
<tr>
<th>Cal. No.</th>
<th>Ampere</th>
<th>Poles</th>
<th>Length*</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>FH16537</td>
<td>175</td>
<td>2</td>
<td>10’</td>
<td>85 lbs.</td>
</tr>
<tr>
<td>FH17537</td>
<td>175</td>
<td>3</td>
<td>10’</td>
<td>93 lbs.</td>
</tr>
<tr>
<td>FH21537</td>
<td>225</td>
<td>2</td>
<td>10’</td>
<td>89 lbs.</td>
</tr>
<tr>
<td>FH22537</td>
<td>225</td>
<td>3</td>
<td>10’</td>
<td>97 lbs.</td>
</tr>
</tbody>
</table>

*10 feet is standard lengths. Shorter lengths furnished on special order.

Expansion Track

Expansion Track sections are for use where it is necessary to compensate for the difference in total expansion or contraction between steel track housings and copper bus bars. They must be used on installations across a building or structural expansion joint.

At least one Expansion Track section should be installed in each 400 ft. of track run. Additional Expansion Track sections may be required if the installation is subjected to a wide range of temperature changes.

The standard 10’ Building Expansion track section is designed to provide 2° of expansion and 2° of contraction of the steel housing above and below the normal 10’ length (at 75°F). If the temperature at the time of installation is other than 75°F, due compensation must be made according to the chart on page 84. The bus bars and track housing in this section telescope to provide a continuous surface for the trolley contacts and the ball bearing support wheels of the trolley. Enclosed flexible jumpers connect the bus bars and maintain full current carrying capacity across the joints.

Sections complete with Bus Bars

<table>
<thead>
<tr>
<th>Cal. No.</th>
<th>Ampere</th>
<th>Poles</th>
<th>Length*</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>FH16555</td>
<td>175</td>
<td>2</td>
<td>10’</td>
<td>118 lbs.</td>
</tr>
<tr>
<td>FH17555</td>
<td>175</td>
<td>3</td>
<td>10’</td>
<td>126 lbs.</td>
</tr>
<tr>
<td>FH21555</td>
<td>225</td>
<td>2</td>
<td>10’</td>
<td>124 lbs.</td>
</tr>
<tr>
<td>FH22555</td>
<td>225</td>
<td>3</td>
<td>10’</td>
<td>130 lbs.</td>
</tr>
</tbody>
</table>

*10 feet is standard length. Shorter lengths furnished on special order.
### Coupling Plate Set

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Amperes</th>
<th>Poles</th>
<th>Wt.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FH17502</td>
<td>175</td>
<td>2 or 3</td>
<td>2-3/4 lb.</td>
<td>Set includes two heavy gauge steel plates and cover assembled with screws, which couple track sections and cover the joint.</td>
</tr>
<tr>
<td>FH22502</td>
<td>225</td>
<td>2 or 3</td>
<td>2-3/4 lb.</td>
<td></td>
</tr>
</tbody>
</table>

### Center Feed Box

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Amperes</th>
<th>Poles</th>
<th>Wt.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FH16503</td>
<td>175</td>
<td>2</td>
<td>9.7 lb.</td>
<td>Heavy gauge steel box furnished with positive pressure type solderless connections, for making electrical connections to the power supply between any two adjoining track sections. Lugs will take either aluminum or copper cables. Removable covers on either side of box permit easy access to terminals.</td>
</tr>
<tr>
<td>FH17503</td>
<td>175</td>
<td>3</td>
<td>11.3 lb.</td>
<td></td>
</tr>
<tr>
<td>FH21503</td>
<td>225</td>
<td>2</td>
<td>10.0 lb.</td>
<td></td>
</tr>
<tr>
<td>FH22503</td>
<td>225</td>
<td>3</td>
<td>11.6 lb.</td>
<td></td>
</tr>
</tbody>
</table>

### End Feed Box Reversible Type

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Amperes</th>
<th>Poles</th>
<th>Wt.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FH15509</td>
<td>175</td>
<td>2</td>
<td>13.3 lb.</td>
<td>Heavy gauge steel box furnished with positive pressure type solderless connections, for making electrical connections to the power supply at the end of a track run. Lugs will take either aluminum copper cables. It also serves as a means of closing the end of the track run. A built-in safety stop prevents trolley from leaving the track run. Design permits box to be reversed so that conduit may be brought in from top or bottom. A removable cover assures easy access to terminals.</td>
</tr>
<tr>
<td>FH17509</td>
<td>175</td>
<td>3</td>
<td>15.5 lb.</td>
<td></td>
</tr>
<tr>
<td>FH21509</td>
<td>225</td>
<td>2</td>
<td>13.8 lb.</td>
<td></td>
</tr>
<tr>
<td>FH22509</td>
<td>225</td>
<td>3</td>
<td>16.0 lb.</td>
<td></td>
</tr>
</tbody>
</table>

### Dead End Cap

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Amperes</th>
<th>Poles</th>
<th>Wt.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FH2107</td>
<td>175 or 225</td>
<td>2 or 3</td>
<td>4 lb.</td>
<td>Dead End Cap</td>
</tr>
</tbody>
</table>

### Track Hangers

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Wt.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FH2105</td>
<td>1-1/2 lb.</td>
<td>These hangers are made up of pre-formed heavy gauge steel straps for supporting track sections. Two hanger sets are required for each track section to provide support every five feet.</td>
</tr>
<tr>
<td>FH2115</td>
<td>2-3/4 lb.</td>
<td></td>
</tr>
</tbody>
</table>

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Cleaning Tools

These special trolley mounted Dust Remover and Bus Bar Cleaners are quickly and easily used to keep a Feedrail Heavy Duty System in prime working condition. They are inserted through the door track section, with the power off, and simply pulled back and forth along the length of a track run, cleaning all bus bars at the same time. Their frequency of use will depend upon the severity of foreign matter accumulations, although a regularly scheduled maintenance program is highly recommended. Refer to page 86 for details.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Description</th>
<th>Poles</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>FH2076</td>
<td>Dust Remover w/Bristle Brushes</td>
<td>2 or 3</td>
<td>1.8 lbs</td>
</tr>
<tr>
<td>FH2077</td>
<td>Bus Bar Cleaners with Cleaning Stones</td>
<td>2 or 3</td>
<td>1.8 lbs</td>
</tr>
</tbody>
</table>

Trolleys

Design and Construction

The same efficient engineering and clean-cut construction which is a hallmark of the entire Feedrail system is evident in the internally track supported Heavy Duty trolleys.

The chassis of these trolleys is of one piece heavy gauge steel. It is equipped with heavy duty enclosed ball-bearing wheels for support; horizontally mounted ball-bearing guide wheels running in the slot of the track to prevent slinging; and ball-bearing wheels on pivoted arms of the undercarriage to prevent upthrust. This wheel combination assures smooth, easy running trolleys.

The insulator-contact assembly consists of a substantially proportioned mechanically strong arc-resisting insulator block on which the contact brushes are mounted and held in true alignment. Springs keep the brushes in continuous firm contact with the bus bars. The insulator-contact assembly is fastened by machine screws and can be removed as a unit.

Specially designed heavy duty silver alloy brush type contacts assure full current carrying capacity. Brushes are individually spring loaded and maintain full contact pressure and alignment with the bus bars at all times.

A heavy gauge sheet steel terminal box with removable side cover is supported by the trolley chassis. This box serves to enclose the solderless type pressure connectors which are used to make cable connections to the trolley.

Lugs take either aluminum or copper cables. Heavy duty cable grips prevent strain on the terminals.

Trolleys are designed for operation at speeds up to 500 feet per minute. A bracket and chain linkage is provided for connecting the trolleys to the powered equipment. Chains are factory adjusted for correct propelling of the trolley in the track run.

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Amperes</th>
<th>Poles</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>FH16525</td>
<td>175</td>
<td>2</td>
<td>36 lbs.</td>
</tr>
<tr>
<td>FH17525</td>
<td>175</td>
<td>3</td>
<td>37 lbs.</td>
</tr>
<tr>
<td>FH21525</td>
<td>225</td>
<td>2</td>
<td>34 lbs.</td>
</tr>
<tr>
<td>FH22525</td>
<td>225</td>
<td>3</td>
<td>35 lbs.</td>
</tr>
</tbody>
</table>

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Joining Straight Sections with Coupling Plate

1. Track sections must be placed so that the diamond match marks are on the same side. Fasten the two steel connection bars to the inside of the lower channel-shaped groove of the track housing so that the bars extend halfway out.

2. Bring the ends of the adjoining track sections together in horizontal and vertical alignment. Attach track connection bars.

3. Fasten the copper splices bars across the bus bar joints with the hex head locking screw as shown. (Use only locking screws provided.)

4. Hook bottom of coupling plates into slots under edge of the track housing. Hold plates in position, put cover in place and fasten.
**Feedrail®**

**FH Series (Feedrail® HD) – Installation Procedure**

**Mounting Reversible End Feed Box**

1. Bolt positive pressure type solderless terminals to bus bars. Lugs should be up if power is to be brought in from top; down if brought in from the bottom.

2. Hook side plates into slots under edges of track housing. Attach end feed box frame to side plates so that conduit hole is at top or bottom to match position at which power will be brought in.

**MOUNTING DEAD END CAP**

3. Connect power source to terminals. (Power supply cables should not put strain on terminals.) Fasten cover to end feed box.

1. Hook dead end cap side plates into slots under edges of track housing. Hold plates in position and fasten end cap in place. Mount top cover.
Coupling Sections with Center Feed Box

1. Join track as shown in steps 1 and 2 on page 81. Attach positive type solderless terminals to bus bars.

2. Hook bottom of feed box side plates into slots under edges of track housing. Place center feed box frame in place and attach to the side plates.

3. Connect power source to terminals. (Power supply cables should not put strain on terminals.) Mount the two cover plates to the center feed box frame.

1. Assemble two piece hanger set over the track section and attach to mounting bracket or other support. (Two hanger sets should be used for each 10 foot track section on approximately 5 foot centers.)

INSTALLING TRACK HANGERS
Installing Sectionalized Track

Sectionalizing Track sections are used to electrically isolate parts of a track run while permitting movement of the trolleys through that portion of the track.

All Sectionalizing Track sections are coupled in the same manner as Plain Track, shown on page 61.

Note: The standard sections described on page 78 have internal insulators of a size which do not prevent the interrupting of the current to the trolley. The current is not only maintained through the trolley but the circuits on both sides are electrically tied together through the trolley contacts as the trolley passes the sectionalizing insulator.

Other special sectionalizing track sections which are used in particular applications do break the current to the trolley. In these cases, two electrically connected trolleys must be used. They must be spaced sufficiently apart so that the contacts of one will be on the bus bars while the contacts of the other are passing the insulator. Unless connected in this manner, power will not be maintained to the trolley contacts as they cross the insulators and arcing at the trolley contacts will occur. Sectionalizing track sections must not be used as a circuit interrupting device.

Installing Expansion Track

At least one Expansion Track section should be installed in each 400 ft. of track run to compensate for the cumulative differences in expansion and contraction between the steel casings and copper bus bars. Additional Expansion Track sections may be required if the installation is subjected to a wide range of temperature changes.

Expansion Track sections must be used wherever an installation is made across a building or structural expansion joint.

The standard 10' Expansion Track section is designed to provide 2' of expansion and 2' of contraction above and below the normal 10' length, at 75°F. At the time of installation, the length of the Expansion Track section must be set in accordance with the table below.

When used at points other than a building or structural expansion joint to compensate for unequal expansion or contraction between the steel track housing and copper bus bars, support the Expansion Track section by the coupling plates at each end and by the center support plates from suitable support brackets. When used across a building expansion joint, center the Expansion Track section across the building expansion joint.

<table>
<thead>
<tr>
<th>Installation Temperature</th>
<th>100</th>
<th>200</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>100°F</td>
<td>9' 11/16&quot;</td>
<td>9' 11/16&quot;</td>
<td>9' 11/16&quot;</td>
</tr>
<tr>
<td>75°F</td>
<td>10'</td>
<td>10'</td>
<td>10'</td>
</tr>
<tr>
<td>50°F</td>
<td>10' ½&quot;</td>
<td>10' ½&quot;</td>
<td>10' ½&quot;</td>
</tr>
<tr>
<td>25°F</td>
<td>10' ½&quot;</td>
<td>10' ½&quot;</td>
<td>10' ½&quot;</td>
</tr>
</tbody>
</table>

*For other temperatures and distances, consult factory.
*Distance represents:
(1) Footage between Expansion Track sections on installation having more than one Expansion Track section.
(2) Overall length of run on installation having only one Expansion Track section.
Mounting of Heavy Duty Trolleys

(1) Press latch pins on bottom of door track section together and open doors.
(2) Insert trolley. If trolley hits polarizing stop, remove, reverse 180° and reinsert. Close track doors.
(3) Mount drive bracket in a horizontal plane as shown below. Chains must be parallel with and on the center line of the track.

When wiring trolleys, a looped flexible wire cable should be used (not rigid or flexible conduit). The flexible cable should be attached to the trolley so no strain is placed on the trolley by the cable. Trolleys should be allowed to travel freely in the track run.

Bracket must be mounted with pulling chain on the center line of the track with centers of bracket mounting holes 2" below track as shown.

NOTE: On 175 Ampere Trolley, cable entrance is located on side of box.

175 Amp. Trolley

225 Amp. Trolley
Feedrail®

FH Series (Feedrail® HD) – Installation Planning and Preventive Maintenance

Installation Planning

Before a Feedrail Heavy Duty System can be planned or an estimate of the cost prepared, the electrical and mechanical requirements that the system must meet should be known. The following outlines the basic data needed for all applications and the additional data required for various specific applications.

Basic for All
1. Describe in detail the purpose of the Feedrail Heavy Duty System. Will it be used with existing equipment?
2. How many conductors will be required?
3. What voltage and current is to be applied to each conductor? Where is the power source located?
4. Details about any special requirements or conditions which the installation must meet such as moisture, corrosive fumes, high or low temperatures, etc.

NOTE: Basic dimensions of the Feedrail Heavy Duty System and various methods of mounting and supporting the system are given on page 82 and 84.

For Electric Hoists
5. Plan view sketch of the rail system on which the hoists will travel, giving the length of run of straight sections, radii of any curves and dimensions of any switches. What is the minimum distance from Feedrail to crane rail in order to clear hoist? Show location of building expansion joints or expansion joints in the structure from which the Feedrail will be supported.
6. How many hoists will be used and what is the horsepower and full load current rating of each? Include horse-power and full load current rating of travel motors of any of the hoists that are motor propelled. What are the maximum travel speeds?

For Production Machines
5. Plan view sketch with dimensions showing the location of the Feedrail System.
6. Indicate the number of conductors required and give voltage and amperage requirement of each. Give horse-power and full load current rating of each motor.

Preventive Maintenance

At all times Feedrail equipment should be so protected and maintained as to be kept clean and dry.

Before the Feedrail system is placed in operation, it should be thoroughly checked for horizontal and vertical alignment, adequate track support, and free movement of trolley travel throughout the entire track run. All track, bus bar and feed connections should be mechanically tight. The system should be checked for possible grounds or short circuits. Any paint, grease, or other foreign matter accumulated during construction should be removed from the bus bars, insulation and track interior. Blow out all dust and other loose particles from inside the track.

Expansion sections, when used, must be properly adjusted, located and supported in accordance with installation instructions. Check bus bars and casing for accurate alignment.

Feedrail is both an electrical and a mechanical system and should be included as a part of your Preventive Maintenance Program.

Electrical Maintenance requires
(1) keeping the System dry and clean to prevent electrical leakage or “shorts” across the insulation, and
(2) maintaining electrical continuity by keeping bus bar contact surfaces clean and joints tight.

Mechanical Maintenance requires
(1) preventing excessive wear and
(2) replacing parts showing excessive wear.

The following Preventive Maintenance procedure, periodically performed is recommended:
(a) Remove, thoroughly clean all trolleys and lubricate the wheels. Inspect contacts for excessive wear. Replace worn wheels and contacts.
(b) Clean bus bars with Feedrail Track Cleaning Tools.
(c) Blow out all foreign particles which should be included as a part of your Preventive Maintenance Program.

For Special Requirements
5. Plan view sketch with all dimensions which are necessary to make clear the location and extent of the Feedrail Heavy Duty. Show the location of the power source.
6. Full details about equipment which will be operated from the system, including
(a) Horsepower and full-load current rating of any electrical motors.
(b) Weight of any equipment to be supported by the system.
(c) Fusing arrangements required.
(d) Number of outlets needed.

Engineering Cooperation

Working out the details of a Feedrail Heavy Duty installation is not difficult once all the electrical and mechanical requirements have been definitely determined. We should like to suggest, however, that considerable time can be saved by enlisting the cooperation of Feedrail engineers from the start. They have helped work out the details of hundreds of installations and consequently have at their fingertips the answers to the questions and problems usually involved. Their cooperation is offered without obligation. Just ask the nearest representative to call — or send us complete information as outlined above with a request for recommendations.
Basic Dimensions of Feedrail Heavy Duty Systems

The following are the basic dimensions of the Heavy Duty Feedrail System. These are offered as a guide only. For detailed or certified drawings consult technical service group.

Mounting Methods

Examples of the methods commonly used for mounting Feedrail Heavy Duty Systems track runs are shown below. These methods can be used in existing plants as well as in new buildings. Engineers and contractors will readily be able to devise other methods to suit special installations. In every case the mounting should be designed to insure a rigid installation in both horizontal and vertical alignment. Rod or strap supports should not exceed 2 feet in length without sway bracing.

Drawing shows track run being fed through reversible end feed box. Dimensions of center feed box are shown at right.
**Feedrail®**

**FH Series (Feedrail® HD) – Typical Specification**

**FH SERIES (Feedrail® ‘HD’)**

The Trolley Busway System (Crane and Hoist Electrification System) shall be of metal encased type with internally track-supported trolleys as manufactured by:

Genuine Feedrail®
Thomas & Betts Corp.
Industrial Products

The System shall have a voltage rating 600 Volts A.C., or 250 Volts D.C. (2 pole) (3 pole), and a continuous current carrying capacity of (175)(225) Amperes per pole. (When used as a Crane and Hoist Electrification System, the System shall be rated at (175)(225) Amperes continuous service and (250)(300) Amperes intermittent service). The full current carrying capacity of the system shall be maintained throughout.

The System shall permit longitudinal movement of the housings and bus bars, independent of each other, in order to allow for unequal expansion and contraction as a result of temperature changes.

The System shall consist of standardized, interchangeable, Feedrail units — track sections, coupling sets, dead and caps, track hangers and power takeoff trolleys, as called for on the plans.

Track sections shall be one-piece, 13 gauge, brake pressed, zinc-coated sheet steel enclosures having a continuous slot in the bottom and a heavy double webbed rib in the top. Rolled or drawn copper bus bars, capable of carrying (175)(225) Amperes per pole continuously without overheating, shall be mounted within the steel enclosure on arc-resistant insulators.

Door track sections shall include two hinged doors in the bottom for insertion and removal of trolleys. Door openings shall have a mechanical polarization to insure proper polarity of the trolleys.

Track supported trolleys shall be Cat. No.______________ as listed in the Feedrail Catalog. They shall have a zinc-plated sheet steel chassis with metal wheels for support.

Horizontal guide wheels shall run in the slot of the Feedrail track to prevent skewing and maintain alignment. Spring-loaded brush contacts shall be mounted on arc-resistant insulation. When inserted in the Feedrail track, the contacts shall align with the bus bars at all times. Trolleys shall be mechanically polarized with respect to door track sections.