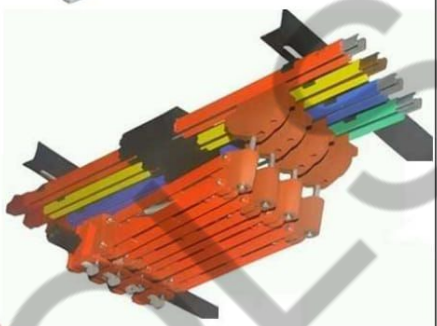
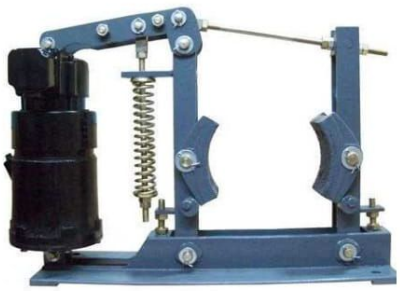





Industrial
Crane Control Equipments

JD CONTROLS

Manufacturer & Supplier of Crane Controller Equipments

LEVER TYPE LIMIT SWITCH - 10/40 AMPS

Introduction

Lever Limit Switches are used for Heavy duty E.O.T. Cranes, Hoists to prevent over travel of hoisting motion on power and control circuit up to 500 V and 40 Amps Continuous current. The limit switch normally remains closed and cuts off power to stop the motor of the crane. The Lever limit switch operates when it reaches a predetermined position when the lever is moved over a projecting member fixed on the girder. The series limit switch is fitted with four sets of contacts which cuts off two phases of the motor in either direction and is suitable for 500 V supply system.

The limit switch contacts are automatically reset when the lever returns to zero position due to spring action. The base and cover have machined surface to protect against dirt and dust.

Applications:

- All Material Handling and Lifting Equipments
- Hoisting : electric wire rope Hoists and Crabs
- Cross travel and Long travel : EOT/ Gantry / Goliath / Derrick Cranes
- Winches and Conveyors Rolling mills
- Sugar, Mining, Cement, Textile Industries to name a few.
- Brake motors.

Technical Data:

Body Material	Aluminum Powder Coated
Enclosure	IP-55 Degree of Protection
Mounting Position	Vertical
Cable Entry	¾" Conduit
Rated Voltage	500 VAC
Thermal Test Current	10 A / 40 A
No. of Contacts	2 NC
Mode of Operation	Two way self resetting
Contact Material	Silver Cadmium

ROTARY GEAR LIMIT SWITCH

Introduction

Rotary geared limit switch is used to trip motor supply when the moving loads reach the extreme end positions of working zone. Rotary geared limit switches are suitable for use on reversing drives such as Hoists, winches, rolling mills and various other mechanisms used in steel plants such as coke oven, feeding machinery etc. A two (or more) contact elements are operated by respective rotating cams, suitably adjusted on a cam shaft which rotates with fixed speed ratio of the drive motor shaft. The cams can be sleeplessly positioned so that they trip motor supply and stop the motion at the set point of travel. The Rotary geared limit switches with IP-44 / IP-55 degree of protection are available in desired NO/NC contacts combinations and specified gear ratios.

Applications:

- All Material Handling and Lifting Equipments
- Hoisting : electric wire rope Hoists and Crabs
- Cross travel and Long travel : EOT/ Gantry / Goliath / Derrick Cranes
- Winches and Conveyors Rolling mills
- Sugar, Mining, Cement, Textile Industries to name a few.
- Brake motors.

Technical Data:

Body Material	Aluminum Powder Coated
Enclosure	IP-55 Degree of Protection
Gear Ratio	48:1, 60:1, 86:1
Mounting Position	Vertical
Cable Entry	¾" Conduit
Rated Voltage	500 VAC
Thermal Test Current	40 A
No. of Contacts	2 NC or 4 NC
Drive Type	Worm Drive
Contact Material	Silver Cadmium

COUNTER WEIGHT LIMIT SWITCH - 10/40 AMP

Introduction

Counter weight Limit Switches are used for Heavy duty E.O.T. Cranes, Hoists to prevent over travel of hoisting motion on power and control circuit up to 500 V and 40 Amps Continuous current. The limit switch normally remains closed and cuts off power to stop the motor of the crane. The Counter Weight limit switch operates when it reaches a predetermined position when the weights rest on the surface of the limit switch.

Applications:

- All Material Handling and Lifting Equipments
- Hoisting : electric wire rope Hoists and Crabs
- Cross travel and Long travel : EOT/ Gantry / Goliath / Derrick Cranes
- Winches and Conveyors Rolling mills
- Sugar, Mining, Cement, Textile Industries to name a few.
- Brake motors.

Technical Data:

Body Material	Aluminum Powder Coated
Enclosure	IP-55 Degree of Protection
Mounting Position	Vertical
Cable Entry	¾" Conduit
Rated Voltage	500 VAC
Thermal Test Current	10 A / 40 A
No. of Contacts	2 NC
Mode of Operation	One way self resetting
Contact Material	Silver Cadmium

WORM DRIVE LIMIT SWITCH – 10 AMPS

Introduction

Worm drive limit switch is used to trip motor supply when the moving loads reach the extreme end positions of working zone. Worm drive limit switches are suitable for use on reversing drives such as Hoists, winches, rolling mills and various other mechanisms used in steel plants such as coke oven, feeding machinery etc. A two (or more) contact elements are operated by respective rotating cams, suitably adjusted on a cam shaft which rotates with fixed speed ratio of the drive motor shaft. The cams can be sleeplessly positioned so that they trip motor supply and stop the motion at the set point of travel. The Rotary geared limit switches with IP-55 degree of protection are available in desired NO/NC contacts combinations and specified gear ratios.

Applications:

- All Material Handling and Lifting Equipments
- Hoisting : electric wire rope Hoists and Crabs
- Cross travel and Long travel : EOT/ Gantry / Goliath / Derrick Cranes
- Winches and Conveyors Rolling mills
- Sugar, Mining, Cement, Textile Industries to name a few.
- Brake motors.

Technical Data:

Body Material	BLACK GFN
Enclosure	IP-55 Degree of Protection
Gear Ratio	1:12.5, 1:25, 1:50, 1:100, 1:200
Mounting Position	Any position
Cable Entry	¾" Conduit
Rated Voltage	500 VAC
Thermal Test Current	10 A
No. of Contacts	2 NC or 4 NC
Drive Type	Worm Drive
Contact Material	Silver Cadmium

ELECTRO HYDRAULIC THRUSTER BRAKE

Introduction

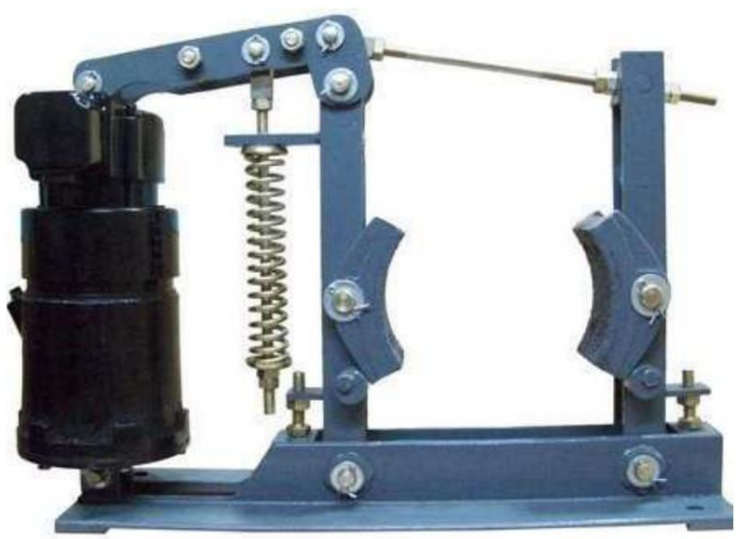
Thruster brake is a device to retard the speed of moving machinery and to stop it accurately to the desired position. The braking force is applied to the brake shoe by a pre-stressed compression spring. The shoes press on the rotating brake drum retarding its speed and finally stopping it. The releasing of the brake and compressing of the spring is done by the Thruster. The thruster shoe brake has a pair of cast iron shoes which are lined up with friction pads. The shoes are hinged on the main arm and the side arm of the brake, each of them having a hinge pin fitted in the base.

They are connected to each other on top by a tie rod, which is hinge in the main arm and locked to the swivel block in the side arm, by a lock nut. A crank lever is hinged on the main arm, and the other end is fixed to the top clevis of the thruster by a hinge pin. A brake spring is fixed on the main arm and is pre-locked by a lock nut on the lever. The pre tension in this spring decides the braking torque. The thruster is fitted on the base by a hinge pin. When the thruster is not energized, the brake shoes are pressed on the brake drum fitted on the drive motor shaft and hold it under the effect of braking force provided by the spring.

In such a condition, the brake is applied and the drum cannot rotate. When the thruster motor is energized, the thrust provided by the thruster lifts up the crank lever which moves the arms and the shoe brakes away from the brake drum, and releasing the braking force. The spring is compressed and braking energy is stored for the next cycle.

Applications:

- All Material Handling and Lifting Equipments
- Hoisting : electric wire rope Hoists and Crabs
- Cross travel and Long travel : EOT/ Gantry / Goliath / Derrick Cranes
- Winches and Conveyors
  Rolling mills
- Sugar, Mining, Cement, Textile Industries to name a few.



Technical Data:

- This is a spring loaded normally ON Failsafe Brake
- Consists of Electro Hydraulic Thruster, Torque Spring and Liner riveted to Brake Shoes
- Works on 415 V AC, 3 Phase, 50 Hz supply.
- Requires Transformer Oil to be filled in the thruster cylinder.
- Function is to bring to stop, moving / rotating machinery like motor / gearbox.
- Holds / stops the load in desired place. Instant stop.
- Prevents jerk due to soft stop.
- Maintenance free, robust design.

Construction:

1. **Base/Arms:** Rigid welded construction with accessible fixing.
2. **Shoes:** Self-aligning, easily removable high grade cast iron fitted with best quantity fabric linings. Large cooling surface design prevents rubbing on drum when brakes are cleared.
3. **The Rod/Guide Rode:** Large section securely fixed in a lug. The tie rod transmits the spring force on the shoes by a simple lever system.
4. **Springs:** Compression springs are vertically mounted through the guide rods and are held securely between guide plates. One or more springs are used depending upon the brake size and thruster capacity to obtain the desired braking torque.

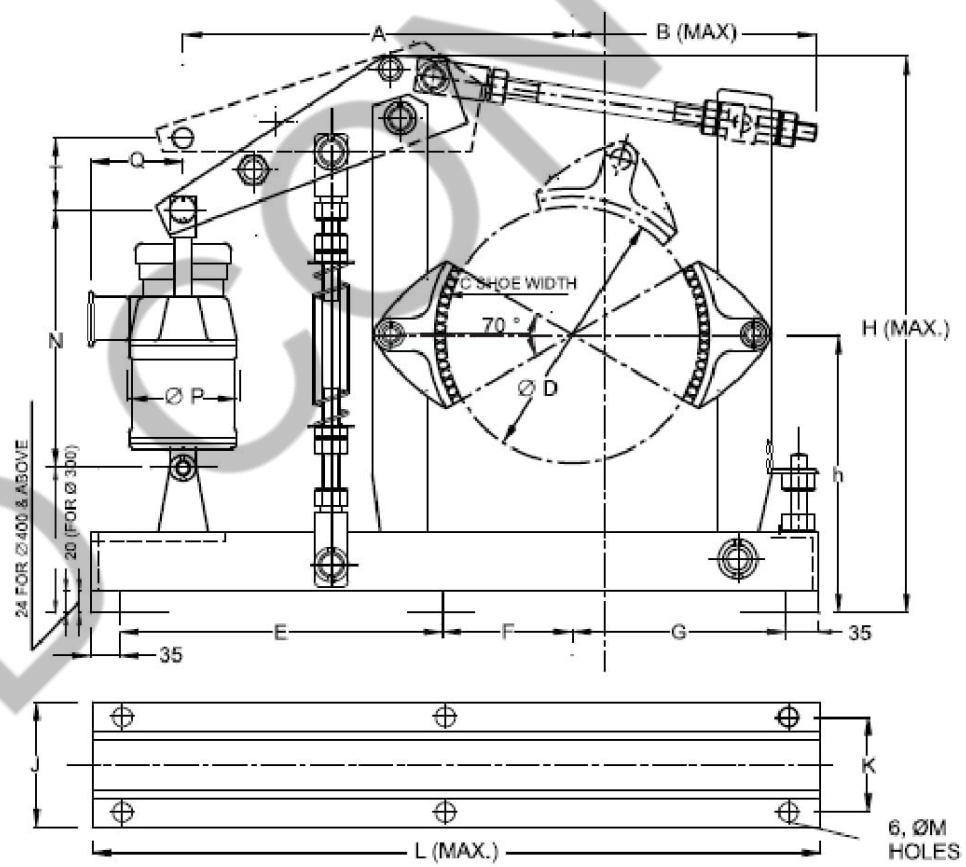
The related motor torque is given by:

$$T = \frac{716.2 \times HP}{RP} \quad \text{OR} \quad \frac{9.25 \times KW}{RP}$$

Brake Type (MDT)	100x18	160x18	200x18	200x34	250x18	250x34	300x18	300x34	300x46	400x34	400x46	400x68
Drum Dia. (mm)	100	160	200	200	250	250	300	300	300	400	400	400
Thruster Capacity (kg)	18	18	18	34	18	34	18	34	46	34	46	68
Stroke (mm)	51	51	51	51	51	51	15	51	51	51	51	51
Braking Torque (Kg-m)	6	9	20	32	35	42	42	62	90	90	110	170

Thruster Brake Dimension Chart:

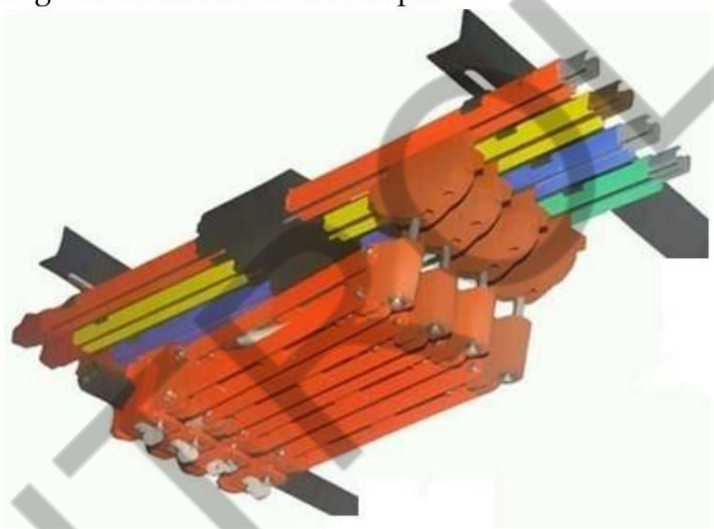
Drums Dia D	100	160	200	250	300	400	500	600	700	800
A	235	265	360	355	430	503	618	688	905	955
B	165	195	215	240	285	350	410	480	585	635
C	70	70	88	100	140	180	200	240	280	320
E	150	150	360	320	460	508	680	765	960	1060
F	-	-	-	-	105	65	150	150	180	205
G	100	100	170	170	250	377	380	465	600	650
h	125	125	200	225	275	310	417	475	550	600
H	415	415	513	563	600	630	857	970	1260	1400
J	130	130	180	160	205	236	302	322	335	350
K	100	100	125	120	145	180	215	235	245	260
L	405	465	600	635	780	955	1130	1300	1650	1800
M	13	13	15	18	20	20	25	25	38	38
Wt Brake Kgs.	17	20	27	30	70	88	125	190	210	240



SHROUDED DSL BUS BAR SYSTEM

Introduction

Shrouded DSL Bus bar systems are used for power transmission. DSL Bus Bar provides a safe & economical supply of electric power for track guided Mobile machinery. Many types of materials used in conductors of DSL bus bar systems (like Galvanised Iron, Aluminum, and Copper). Widely used in EOT cranes. The range of current 60 to 800 Amps.



Applications:

- EOT Cranes.
- Hoist.
- Jib Cranes.
- Conveyor System.
- Electrically Operated Equipment.
- Material Handling Equipment.

Features:

- Touch proof, no exposed live part.
- Quick & easy Installation.
- Insulating cover shaped to shed from water and dust.
- Suitable for Indoor / Outdoor Installation.
- 4.5 meter bar length
- 60, 100, 125 Amp available in Galvanised Iron
- 200, 315 & 400 Amps available in Aluminum / stainless steel
- 160, 250 & 400 Amps available in copper

Parts:

Joint Clamp

Joint Cover

1 Pole Hanger

3 Pole Hanger

4 Pole Hanger

End Cover

Power Feed

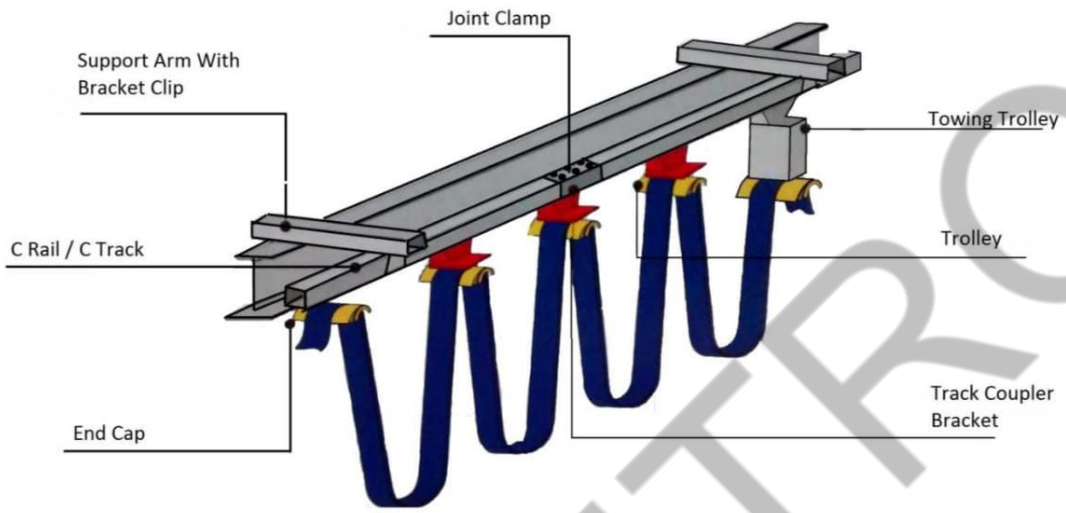
Current Collector 125

C.C bracket

C RAIL FESTOON SYSTEM

Introduction

C Rail systems are used for providing power to a runway, power & control to a bridge crane, or lower voltage control to a separate pendant station. C Rail festoons are generally used for providing power & control to a hoist & trolleys & many cranes.



Applications:

- EOT Cranes.
- Hoist.
- Jib Cranes.
- Conveyor System.
- Electrically Operated Equipment.
- Material Handling Equipment.

Features:

- Easy Handling
- Quick & easy Installation.
- Suitable for Indoor / Outdoor Installation.
- 4.0 meter bar length

Parts:

Cable Trolley

Hanger Clamp

Joint Clamp

Towing Trolley

Fixed Trolley

End Stop

RESISTANCE BOX / DBR

Introduction

S.S. Punched grid Resistance Boxes are designed to meet requirements of A.C & D.C. application for E.O.T. Cranes, Winches, Rubber Mills, Flour Mills, Coal Mines, Cement Mills, Power Plants, Conveyors, Coke Oven, Blowers etc. for Speed control and developing Starting Torque. S.S. Punched grid Resistance Boxes consist of Grids Punched from Nickel Chromium Steel Alloy Sheet. These grids are shock and vibration proof. These resistors are specially suited for Steel mill duty, Coal mines etc…

Applications:

- Steel & rolling mill
- Material Handling equipments
- Winches and Conveyors
  Rolling mills
- Sugar, Mining, Cement, Textile
  Industries to name a few.
- Slip ring motors.

Technical data:

Materials	Stainless steel
Enclosure	Galvanized sheet steel
Cooling	Natural air cooled
Mounting Position	floor
Cable Entry	Bottom
Rated Voltage	600 V
Current Rating	8 Amp to 800 Amp
Over Ambient Temperature	375° C

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