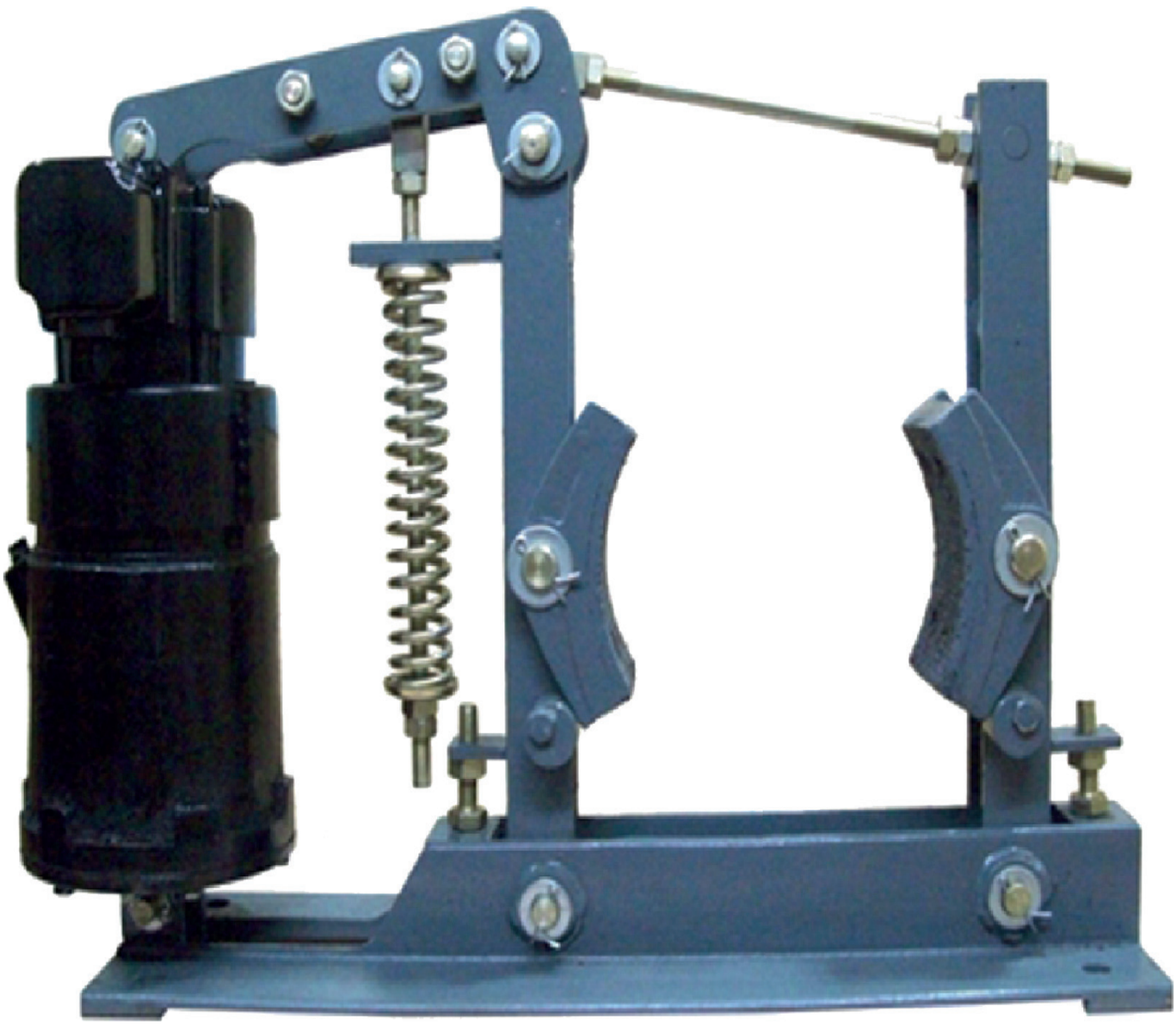
BOSON ENGINEERS
EXCELLENCE IN ENGINEERING

ELECTRO HYDRAULIC THRUSTER BRAKES



BOSON ENGINEERING PVT LTD.

BRITISH TECHNOLOGY AT ITS BEST

CONTACT US:

Corporate Office: 22 Richard Court, Stanley Road London W3 8FT, London, UK
India Office: BC – 121, Sector – I, Saltlake, Kolktata – 700 064
Mobile: +91 98302 26444. Phone: 0044 (0)20 7193 7286
E-mail: sales@bosonengineers.co.in, Website: www.bosonengineers.co.in

BOSON ENGINEERS
EXCELLENCE IN ENGINEERING

BOSON ELECTRO HYDRAULIC THRUSTER BRAKES

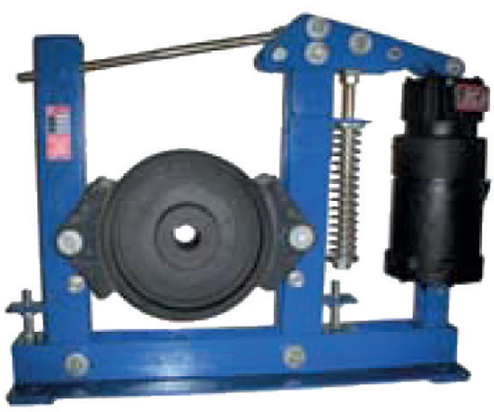
Thruster brake is a device used to retard the speed of moving machinery and to stop it accurately to the desired position. The braking force is applied to the brake shoes by a pre stressed comprising spring. The releasing of the brake drum and compressing of the spring is done by thruster.

Assembly and Function

A thruster shoe brake has a pair of cast iron shoes which are lined up with friction pads. The shoe are on main arm side arm of the brake, each of them have a hinge pin fitted in the base. They are connected to each other on top by a tie rod, which is hinged 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-loaded by a locknut 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 condition, the brake is applied and the drum cannot rotate.

As the piston travels upwards the angle lever turns, pushes the brake rod and compresses the brake spring. Simultaneously, the brake lever on the other side of the wheel (Brake Drum) is retracted. When the first lever reaches the stop on the brake base member the brake lever at the thruster begins to move, releasing the brake drum.



Electro Hydraulic Thruster Brakes. Mill duty Crane Control Equipments make Electro Hydraulic Thruster Brakes that are suitable for 400/440 Volts, 3Phase AC supply for a wide range of drum sizes from 100mm to 600mm dia. The braking to the shoes is transmitted from the springs by means of an extremely rigid and simple lever / tie rod mechanism.

Since these Brakes are in normally closed position, the release of the Brake Shoes is effected by energizing the 3phase Electro Hydraulic Thruster, which over comes the spring force and the shoes are moved clear off the Drum by lever / arm linkage system, so that the Drum is free to rotate without any friction.

The angle of the Shoe being 70 degree makes the replacement and maintenance of the Brake Shoes easy at site.

The design of the Brake is such that as the Lining keeps wearing out due to normal operation of the Brake, the Thruster stroke adjusts itself on its own to achieve the rated torque.

BOSON ENGINEERING PVT LTD.

BRITISH TECHNOLOGY AT ITS BEST

CONTACT US:

Corporate Office: 22 Richard Court, Stanley Road London W3 8FT, London, UK
India Office: BC – 121, Sector – I, Saltlake, Kolktata – 700 064
Mobile: +91 98302 26444. Phone: 0044 (0)20 7193 7286
E-mail: sales@bosonengineers.co.in, Website: www.bosonengineers.co.in

NABCB UKAS QUALITY MANAGEMENT

BOSON ENGINEERS
EXCELLENCE IN ENGINEERING

Our Mill Duty Thruster Brakes forms part of the brake is a self contained unit and comprises of a centrifugal pimp and impeller drives by an electric motor which is of.

When the power in given to the Thruster unit the impeller spins on oil and develops a pressure heard which is impressed upon the Piston.

Since the Piston is connected to the arm of the Brake the arm is pushed and the Brake opens up.

When specified, Brake Drum or Drum Coupling both Pin Bush type and Flexible Geared type can be supplied along with the Brakes.

TECHNICAL SPECIFICATIONS

Model No.	DRU	Barking Torque (Kg. M)	THRUSTER DETAILS			Length (Max.)	Width (Max.)	Height (Max.)
			Model No.	Force (Kg)	Stroke (MM)			
BE-EHTB 100/18	100	6	BE-EHTB 18	18	51	425	140	430
BE-EHTB 150/18	150	9	BE-EHTB 18	18	51	550	200	450
BE-EHTB 160/18	160	10	BE-EHTB 18	18	51	550	200	450
BE-EHTB 200/18	200	20	BE-EHTB 18	18	51	675	200	450
BE -EHTB 200/34	200	32	BE-EHTB 34	34	51	763	225	575
BE-EHTB 250/18	250	35	BE-EHTB 18	18	51	725	200	525
BE -EHTB 250/34	250	42	BE-EHTB 34	34	51	850	225	575
BE-EHTB 300/18	300	42	BE-EHTB 18	18	51	850	225	575
BE-EHTB 300/34	300	62	BE-EHTB 34	34	51	850	225	625
BE -EHTB 400/46	400	90	BE-EHTB 18	34	51	1000	238	675
BE -EHTB 400/68	400	110	BE-EHTB 18	46	51	1000	238	675
BE-EHTB 500/46	500	190	BE-EHTB 18	46	51	1525	262	700
BE-EHTB 500/68	500	290	BE-EHTB 18	68	76	1525	262	700
BE-EHTB 600/68	100	350	BE-EHTB 18	68	76	1625	262	775

- Rugged Design
- Consistant Braking Performance
- Robust In Construction
- Long Life
- Trouble Free Maintainence
- Easy In Service

BOSON ENGINEERING PVT LTD.

BRITISH TECHNOLOGY AT ITS BEST

CONTACT US:

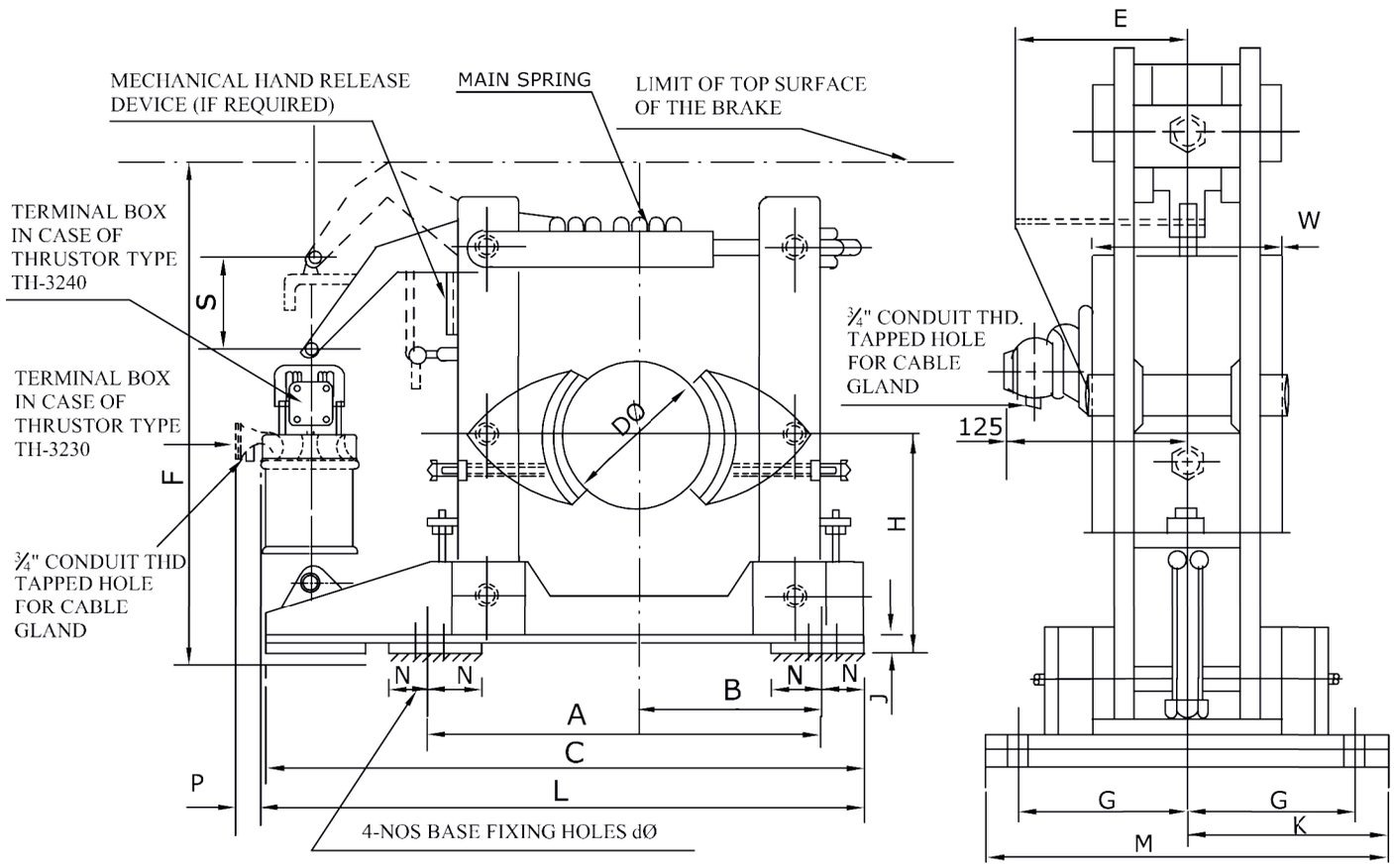
Corporate Office: 22 Richard Court, Stanley Road London W3 8FT, London, UK

India Office: BC – 121, Sector – I, Saltlake, Kolktata – 700 064

Mobile: +91 98302 26444. Phone: 0044 (0)20 7193 7286

E-mail: sales@bosonengineers.co.in, Website: www.bosonengineers.co.in

BOSON ENGINEERS
EXCELLENCE IN ENGINEERING



Brake Type	Thruster Type	Drum Ø In mm	Braking Trq. In Kgm.	Brake Shoe Width	Dimensions Are In M.M														Appx. Wt. In Kg.
					A	B	C	E	F	G	H	J	K	L	M	N	P	S	DØ	
100	TH 3240	100	4.50	60	250	125	410	90	500	50	144	12	65	465	130	37.5	57	50	13	73
150	TH 3240	150	9	70	310	155	476	90	520	50	144	12	65	531	130	37.5	57	50	13	85
160	TH 3240	160	9	70	310	155	476	90	520	50	144	12	65	531	130	37.5	57	50	13	85
200	TH 3240	200	14	100	370	185	608	104	500	60	164	14	75	663	150	37.5	57	50	13	108
250	TH 3240	250	42	100	440	220	645	140	610	70	225	16	90	700	180	37.5	57	50	13	125
300	TH 3240	300	50	125	530	265	771	140	550	80	232	16	100	826	200	37.5	57	50	17	147
315	TH 3240	315	50	140	530	265	771	140	550	80	232	16	100	826	200	37.5	57	50	17	150

NOTES:

1. WITH THRUSTOR TYPE TH 3230 (INSTEAD OF TH3240 BRAKE TYPE ARE DESIGNATED STR (INSTED OF 5BTS).
2. DIMENSION OF FIXING CENTRE AND CENTRE HEIGHT WILL BE MAINTAINED OTHER DIMENSIONS ARE APPROXIMATE EX-TREMA OR INDICATIVE
3. THIS SUPERSED FOR 5BTS SERIES
4. A1-ARM STOP AT THRUSTOR END AND THRUSTOR CABLE ENTRY SHOWN AND AUX SPRING OMITTED.

OUTSIDE DIMENSION OF THRUSTOR RELEASED SPRING, ACTUATED BRAKES FOR TYPE 5TS SERIES

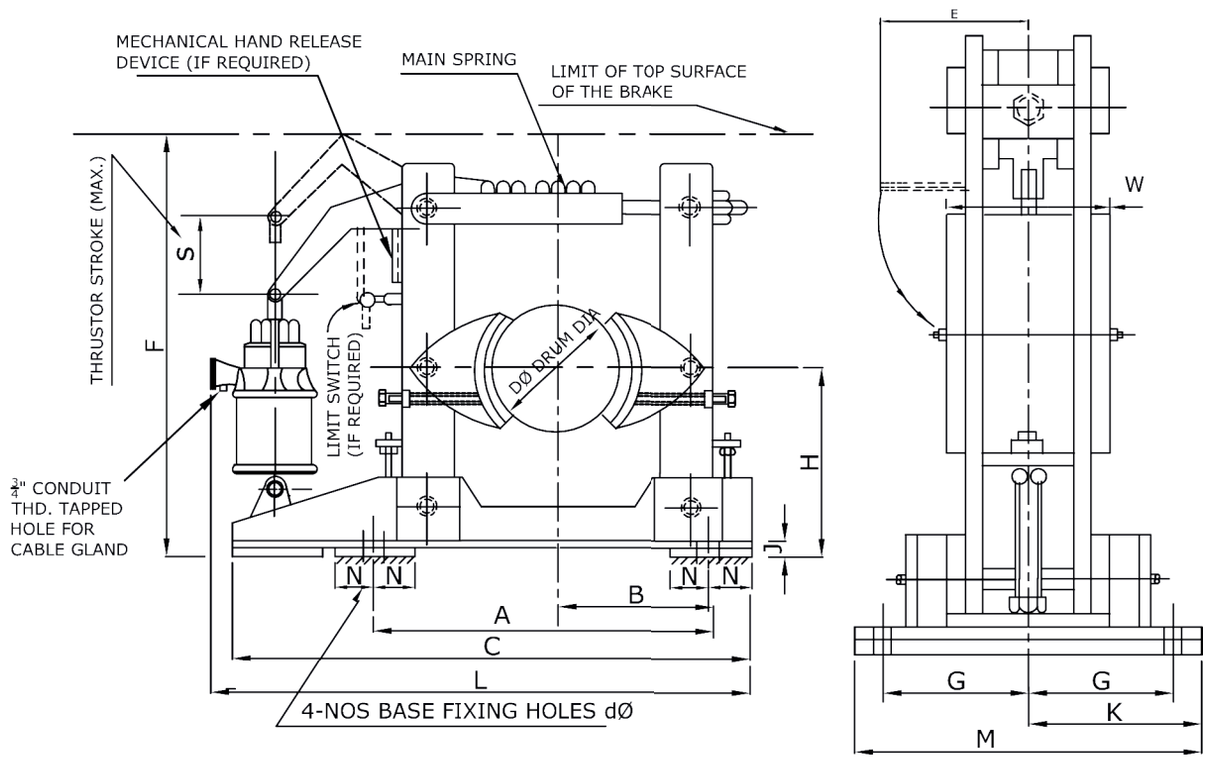
BOSON ENGINEERING PVT LTD.

BRITISH TECHNOLOGY AT ITS BEST

CONTACT US:

Corporate Office: 22 Richard Court, Stanley Road London W3 8FT, London, UK
India Office: BC – 121, Sector – I, Saltlake, Kolktata – 700 064
Mobile: +91 98302 26444. Phone: 0044 (0)20 7193 7286
E-mail: sales@bosonengineers.co.in, Website: www.bosonengineers.co.in

BOSON ENGINEERS
EXCELLENCE IN ENGINEERING



Size BE-EHTB 3275	Thruster Type	Drum Ø In mm	Braking Trq. In Kgm.	Brake Shoe Width	Dimensions Are In M.M.													Appx. Wt. In Kg.
					A	B	C	E	F	G	H	J	K	L	M	N	S	D
100	TH3275/TC	100	7.80	60	250	125	410	90	563	50	144	12	65	522	130	37.5	50	13	73
101	TH3275/TC	100	7.80	60	250	125	410	90	400	50	100	12	65	522	130	37.5	50	13	73
150	TH3275/TC	150	11.50	70	310	155	476	90	600	50	144	12	65	588	130	37.5	50	13	85
160	TH3275/TC	160	11.50	70	310	155	476	90	600	50	144	12	65	500	130	37.5	50	13	85
200	TH3275/TC	200	25.30	100	370	185	608	104	578	60	164	14	75	720	150	37.5	50	13	108
250	TH3275/TC	250	75.00	100	440	220	645	140	605	70	225	16	90	757	180	37.5	50	13	125
300	TH32100/TC	300	93.00	125	530	265	771	140	572	80	232	16	100	883	200	37.5	50	17	147
315	TH32100/TC	315	93.00	140	530	265	771	140	572	80	232	16	100	883	200	37.5	50	17	150
376	TH32120/TC	376	93.00	160	616	300	875	140	662	100	288	16	125	987	200	37.5	70	17	220
400	TH32120/TC	400	159.00	150	640	320	900	140	673	100	300	16	125	1012	250	37.5	50	17	236
401	TH32121/TC	400	210.00	150	640	320	900	140	673	100	300	16	125	1012	250	37.5	50	17	236
450	TH32121/TC	450	162.00	200	740	370	1050	200	715	100	325	18	125	1087	250	40.0	75	18	295
500	TH32120/TC	500	165.00	200	740	370	1100	200	765	100	350	18	125	1137	250	60.0	75	18	315
501	TH32121/TC	500	250.00	200	740	370	1100	200	765	100	350	18	125	1137	250	60.0	75	18	315

BOSON ENGINEERING PVT LTD.

BRITISH TECHNOLOGY AT ITS BEST

CONTACT US:

Corporate Office: 22 Richard Court, Stanley Road London W3 8FT, London, UK

India Office: BC – 121, Sector – I, Saltlake, Kolktata – 700 064

Mobile: +91 98302 26444. Phone: 0044 (0)20 7193 7286

E-mail: sales@bosonengineers.co.in, Website: www.bosonengineers.co.in