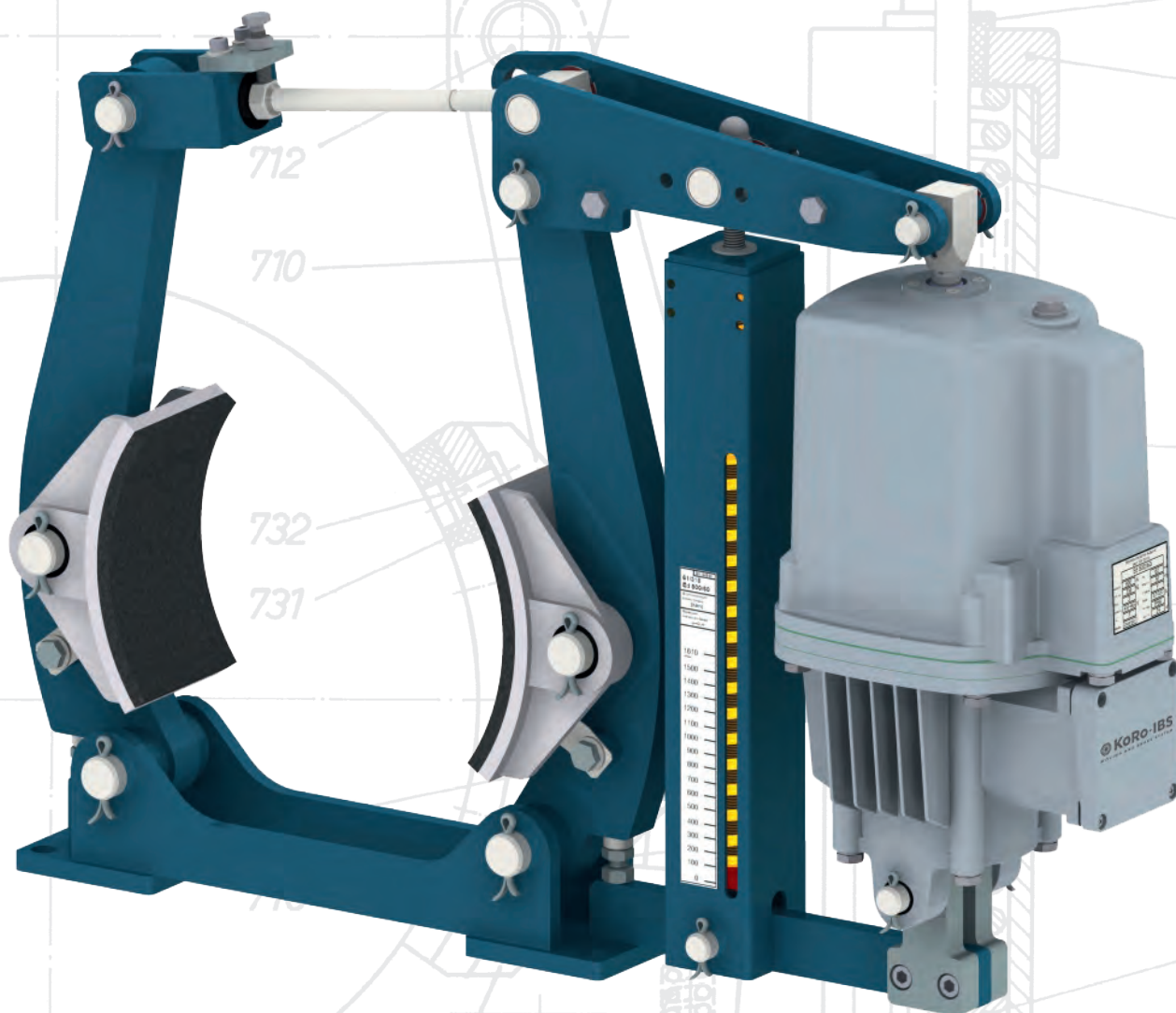


7531 755 7522 753 7871
757 754 7523 7521 752 756 787



KoRo-IBS

MOVING AND BRAKE SYSTEM



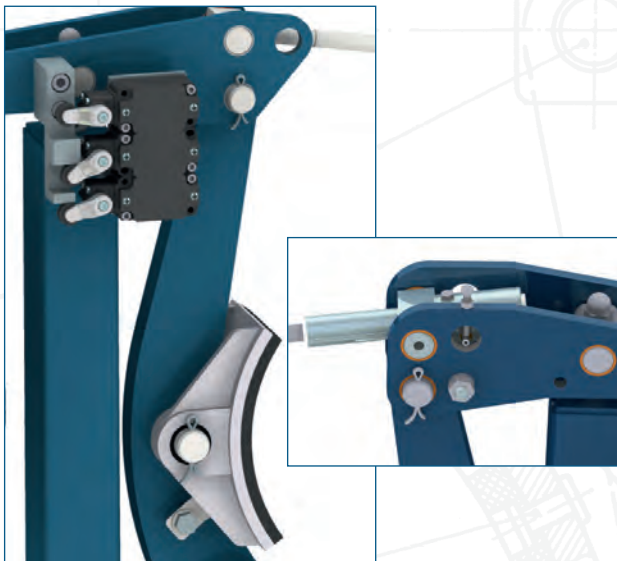
Drum brakes

According to DIN 15 435

Industrial Brakes · Thrusters · Pressure Oil Pumps · Couplings · Hydraulic Buffers · Cellular Buffers
Rail Pliers · Sheaves · Hook Blocks · Crane Rail Wheels · Rail Clamps · Repairation · Service

Specific features of KoRo IBS drum brakes

Brakes are manufactured according to DIN 15 435, therefore interchangeability is guaranteed.



Drum brakes are delivered including brake shoes. Design according to DIN 15 435 with steel bushings, brake shoe clamp spring, brake lining HWN $\mu = 0,4$ bonded, all bolts, tie rod and crossed bolt made of stainless steel, nuts and cotter pins are zinc plated, maintenance free bushings, inclusive 2 components top coat RAL blue 80 μm .

A closed spring tube will protect the spring from damage and contamination.

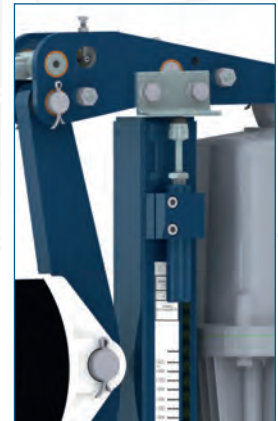
Brake torque is adjustable, brake torque scale in fire proof design with Nm-graduation for coefficient of friction $\mu=0,4$

Material:

- ➔ All supporting parts made of S 3355J2+N (St52-3)
- ➔ All bolts made of 1.4104
- ➔ Pull – spring balancer rod made of V2A
- ➔ Crossed bolt, tie rod, traverse made of V2A
- ➔ Screws, nuts, cotter pins made of V2A or zinc-plated
- ➔ In all joints maintenance-free DU bushings

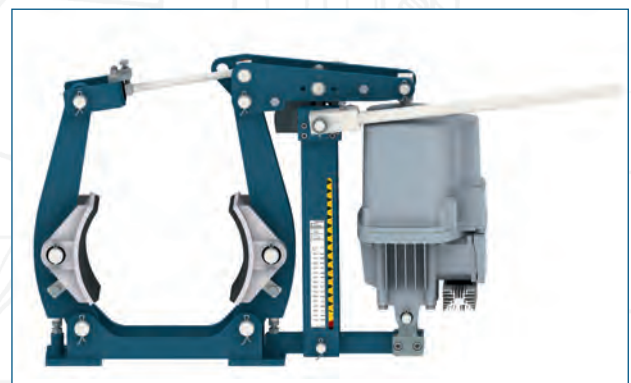
Cover made of makrolon (impact and shatter proof plastic) 5 mm thick incl. cut outs for shaft and brake drum according to drawing. Condition of brake is visible through cover, without a need of demounting.

Fall-in damping to slow down the brake torque application within the last third of the brake-lift. The advantage to a lowering valve is the time delay action of the closure starts shortly before the brake linings touch the brake drum, and the fall-in-time is not as distinctly influenced as with a lowering valve.



Further options:

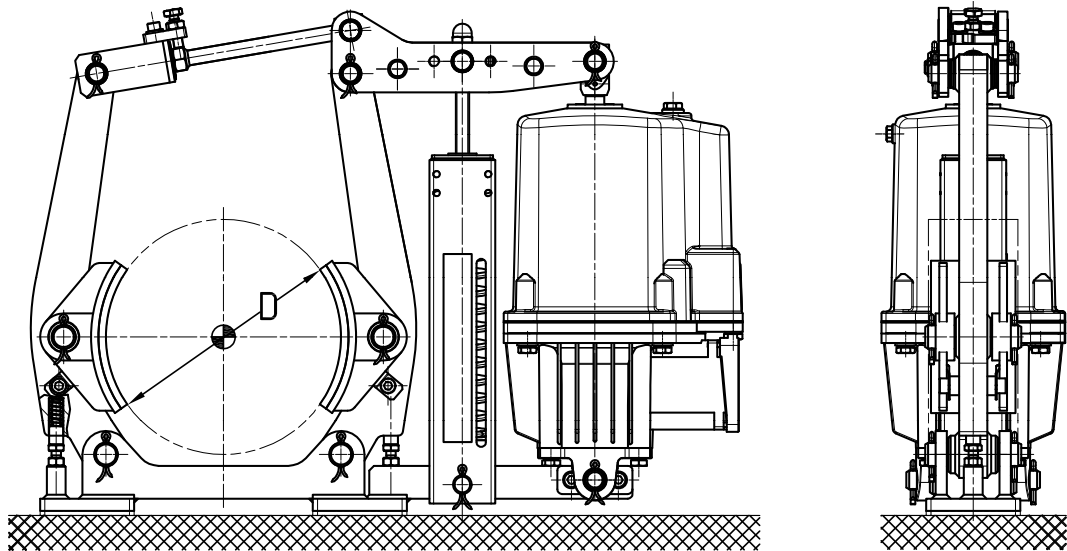
- ➔ Automatic wear adjustment (AVN)
- ➔ Brake lining riveted or riveted and bonded
- ➔ Different lining qualities and coefficient of friction
- ➔ Greaseable bearings (bushings)
- ➔ Special design for horizontal or suspended mounting with support
- ➔ Limit switches and monitoring devices for brake indication, brake lining wear, temperature etc.
- ➔ Hand lifting device



KoRo-IBS brakes have mounting dimensions according to DIN 15435 and therefore guarantee compability with identically constructed brakes of other manufacturers according to DIN 15435.

Type IBT (standard series):

- Single bar brake lever
- Adjustable stops for brake levers and brake shoes



Adjusting bolt to evenly lift brake shoes (recommended if brake drum axis centerline does not match the centerline between base plate mounting holes).



Common features of the series IBT

Function of brake:

- Braking by spring power
- Lifting by thruster
- Brake torque adjustable
- Brake closes in case of power failure (Fail-Safe Principle)

Type:

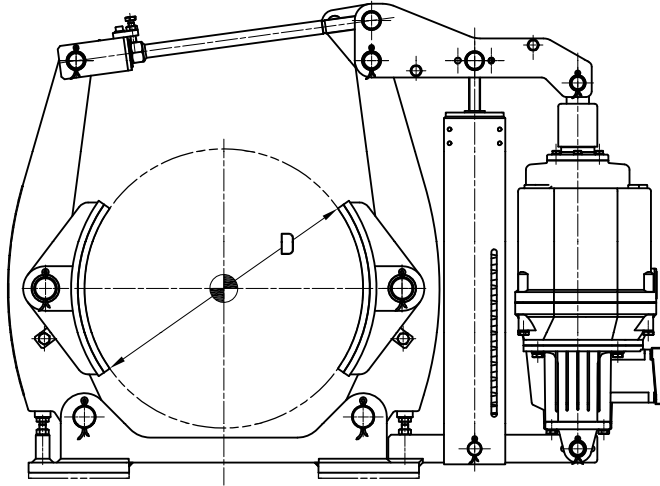
- Spring and thruster are mounted laterally
- Single bar brake lever, made of steel, small construction

Material:

- All supporting parts made of S S355J2+N (St52-3)
- All bolts made of 1.4104
- Pull – spring balancer rod made of V2A
- Crossed bolt, tie rod, traverse made of V2A
- Screws, Nut, cotter pin made of V2A or zinc-plated
- In all joints maintenance-free DU bushings

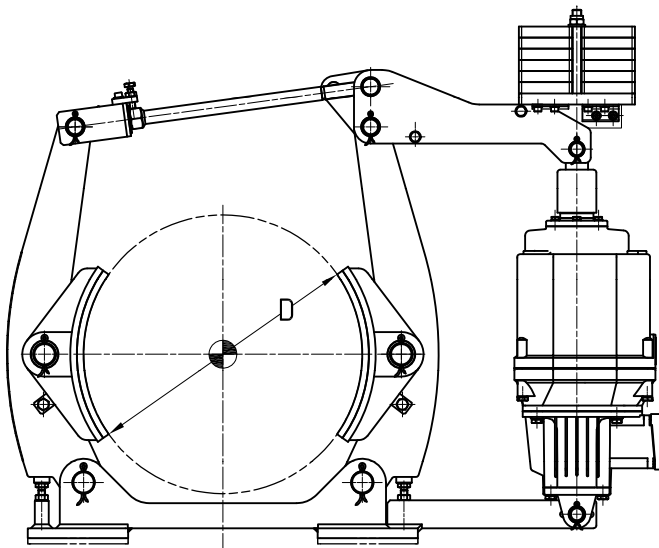
Special features:

- Brakes are made acc. to DIN 15 435, therefore interchangeability is guaranteed
- Enclosed spring tube protects spring from damage and contamination
- Brake torque adjustable, brake torque scale in Nm-segments for coefficient of friction $\mu = 0,4$
- Options and accessoires (selection):
 - automatic wear adjustment (AVN)
 - brake lining riveted and/or bonded
 - different lining qualities and different coefficients of friction are available
 - regreasable bearings (lubrication bolts)
 - special design for horizontal or suspended mounting with support
 - limit switches and monitoring devices for:
 - brake indication (open/closed), residual stroke, brake lining wear etc.
 - manual lifting



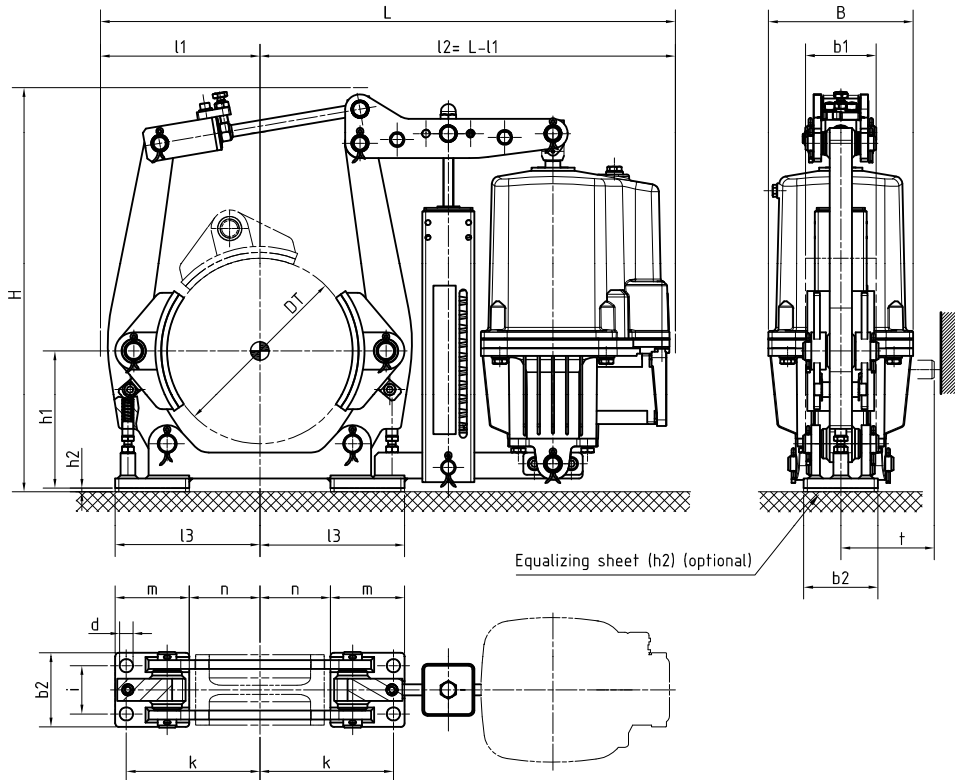
Type IBT

- Braking by spring power
- Lifting by thruster
- Torque adjustable
- Brake closes in case of power failure (Fail-Safe Principle)



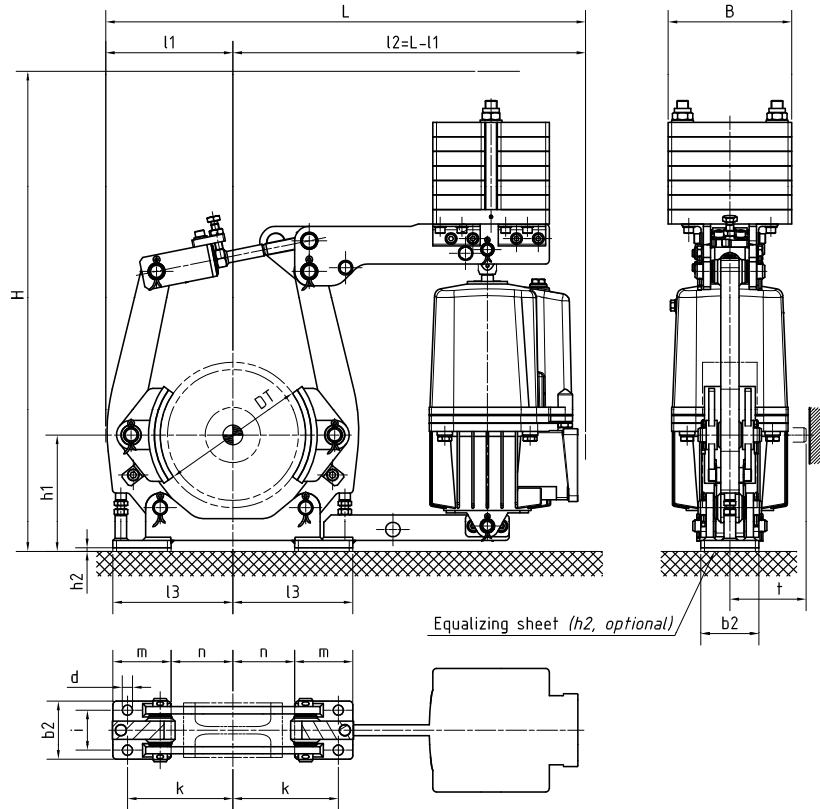
Type IBTG

- Braking by weight
- Lifting by thruster
- Torque adjustable
- Brake closes in case of power failure (Fail-Safe Principle)
- Other lifting devices available on request



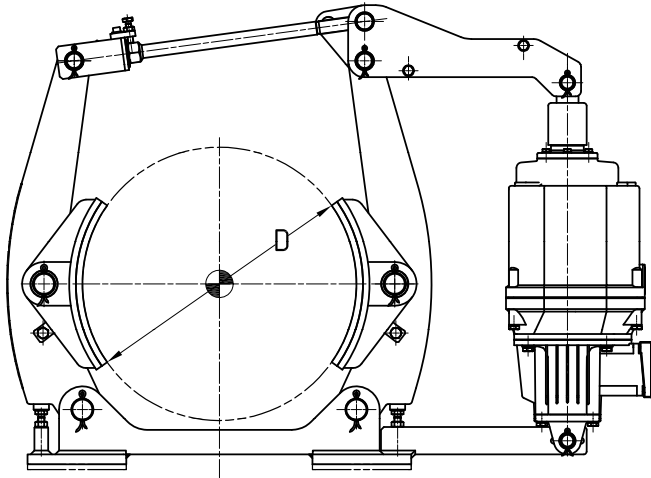
DT mm	Thruster acc. to DIN 15 430	Brake torque ¹⁾ Nm for $\mu = 0,4$	B	b1	b2	d	H	h1	h2	L	l1	l3	i	k	m	n	t	m ²⁾ kg
			mm															
200	Ed 230 - 50	50 - 300	160	75	80	14	480	155	5	670	185	165	55	145	80	85	105	26
	Ed 300 - 50	50 - 420								670								
250L	Ed 230 - 50	50 - 300	160	95	100	18	550	185	5	740	215	195	65	180	100	95	126	35
	Ed 300 - 50	50 - 425								740								
250S	Ed 500 - 60	80 - 800	195	95	100	18	550	185	5	775	215	195	65	180	100	95	126	54
	Ed 230 - 50	80 - 375								875								
315	Ed 300 - 50	80 - 525	160	118	110	18	640	225	5	875	265	235	80	220	110	125	151	55
	Ed 500 - 60	120 - 940																
	Ed 800 - 60	120 - 1610	195	720	270	10	1000	330	300	100	270	140	160	190	68			
	Ed 230 - 50	120 - 375	1005															
400L	Ed 300 - 50	120 - 525	195	150	140	22	720	270	10	1040	330	300	100	270	140	160	190	70
	Ed 500 - 60	200 - 940								1040								
	Ed 800 - 60	200 - 1610	195	150	140	22	830	270	10	1090	330	300	100	270	140	160	190	95
	Ed 1250 - 60	200 - 2580	240	150	140	22	830	270	10	1090	330	300	100	270	140	160	190	95
400S	Ed 2000 - 60	200 - 4000	240	150	140	22	830	270	10	1090	330	300	100	270	140	160	190	95
	Ed 500 - 60	250 - 1250	195	190	180	22	880	330	10	1240	400	360	130	325	180	180	235	130
	Ed 800 - 60	250 - 2080																
	Ed 1250 - 60	250 - 3200	240	190	180	22	880	330	10	1230	400	360	130	325	180	180	235	130
Ed 2000 - 60	250 - 5000	240	190	180	22	880	330	10	1230	400	360	130	325	180	180	235	130	
500	Ed 3000 - 60	350 - 7300	240	236	220	27	1060	410	10	1380	475	445	170	400	220	225	285	195
	Ed 1250 - 60	350 - 3200	240	265	240	27	1160	460	10	1535	535	500	190	450	240	260	320	240
630	Ed 2000 - 60	350 - 5000	240	265	240	27	1160	460	10	1535	535	500	190	450	240	260	320	240
	Ed 3000 - 60	350 - 7600																
	Ed 1250 - 60	450 - 3600	240	265	240	27	1160	460	10	1535	535	500	190	450	240	260	320	240
	Ed 2000 - 60	450 - 5600	240	265	240	27	1160	460	10	1535	535	500	190	450	240	260	320	240
710	Ed 3000 - 60	450 - 8600	240	265	240	27	1160	460	10	1535	535	500	190	450	240	260	320	240
	Ed 3000 - 120	1000 - 10000																

- 1) Friction coefficient can be subject to fluctuations caused by different operating factors such as sliding speed, surface pressure, thermal impact, condition of friction surface, brake drum material and ambient conditions. If calculating brake sizes DIN 15 434 should be used as reference. The stated brake torque values are for dynamic braking at operating speed till 25 m/sec. and brake drums made of cast iron or spherical graphite iron. The operating temperature should not exceed 200 °C.
- 2) Without thruster.



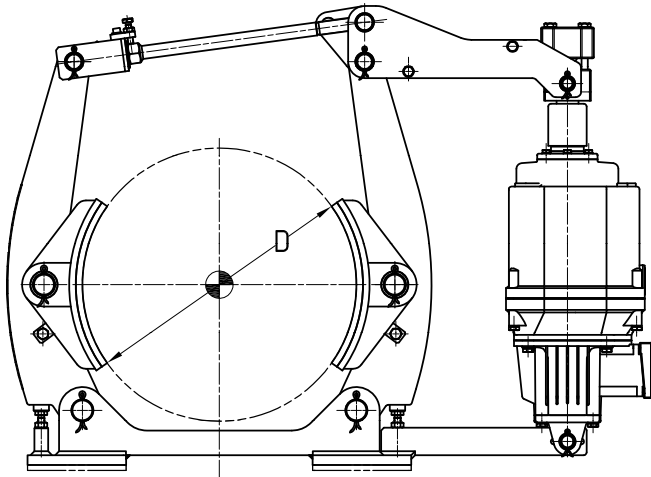
DT mm	Thruster acc. to DIN 15 430	Brake torque ¹⁾ Nm for $\mu = 0,4$	B	b1	b2	d	H ³⁾	h1	h2	L	l1	l3	i	k	m	n	t	kg ²⁾		
																			mm	
200	Ed 230 - 50	50 - 300	200	75	80	14	550	155	5	645	180	175	55	145	90	85	105	21		
	Ed 300 - 50	50 - 420					575			640										
250L	Ed 230 - 50	50 - 300	200	95	100	18	580	185	5	707	207	205	65	180	100	105	126	26		
	Ed 300 - 50	50 - 425					605			702										
250S	Ed 500 - 60	120 - 800	235	95	100	18	670	185	5	767	207	205	65	180	100	105	126	28		
	Ed 230 - 50	80 - 375					690			835										
315	Ed 300 - 50	80 - 525	200	118	110	18	715	225	5	830	260	245	80	220	110	135	151	44		
	Ed 500 - 60	120 - 940					730			870										
	Ed 800 - 60	120 - 1610					795			870										
400L	Ed 230 - 50	120 - 375	200	150	140	22	755	270	10	962	322	300	100	270	120	180	190	58		
	Ed 300 - 50	120 - 525					780			957										
	Ed 500 - 60	200 - 940					790			997										
	Ed 800 - 60	200 - 1610					855			997										
400S	Ed 1250 - 60	170 - 2580	280	150	140	22	995	270	10	1052	322	300	100	270	120	180	190	85		
	Ed 2000 - 60	170 - 4000					1115			1052										
500	Ed 500 - 60	250 - 1250	235	190	180	22	960	330	10	1195	395	360	130	325	140	220	235	120		
	Ed 800 - 60	250 - 2080					1025			1195										
	Ed 1250 - 60	250 - 3200					1045			1185										
	Ed 2000 - 60	250 - 5000					1165			1185										
630	Ed 1250 - 60	350 - 3200	280	236	220	27	1225	410	10	1340	470	445	170	400	160	285	285	175		
	Ed 2000 - 60	350 - 5000					1345			1340										
	Ed 3000 - 60	350 - 7600					1510			1340										
710	Ed 1250 - 60	450 - 3600	305	265	240	27	1285	460	10	1485	530	500	190	450	180	320	320	230		
	Ed 2000 - 60	450 - 5600					1385			1485										
	Ed 3000 - 60	450 - 8600					1525			1485										
	Ed 3000-120	1000 -10000					1585			1485										

- 1) Friction coefficient can be subject to fluctuations caused by different operating factors such as sliding speed, surface pressure, thermal impact, condition of friction surface, brake drum material and ambient conditions. If calculating brake sizes DIN 15 434 should be used as reference. The stated brake torque values are for dynamic braking at operating speed till 25 m/sec. and brake drums made of cast iron or spherical graphite iron. The operating temperature should not exceed 200 °C.
- 2) Without thruster.
- 3) The measure H can vary depending on the brake features. Exact measure H should be requested project specifically.



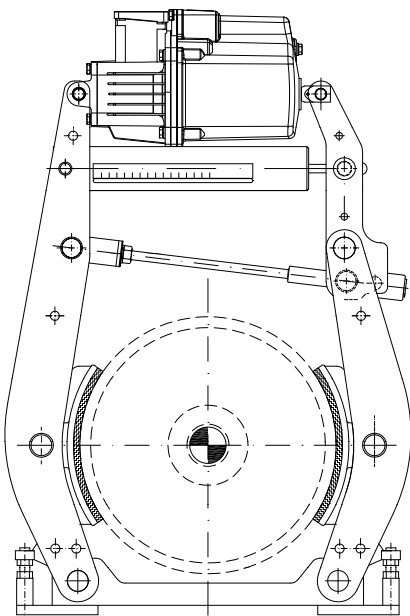
Type IBTC

- For thruster with integrated spring (c-pring)
- Brake torque not adjustable
- Brake closes in case of power failure (Fail-Safe Principle)
- Other lifting devices on request



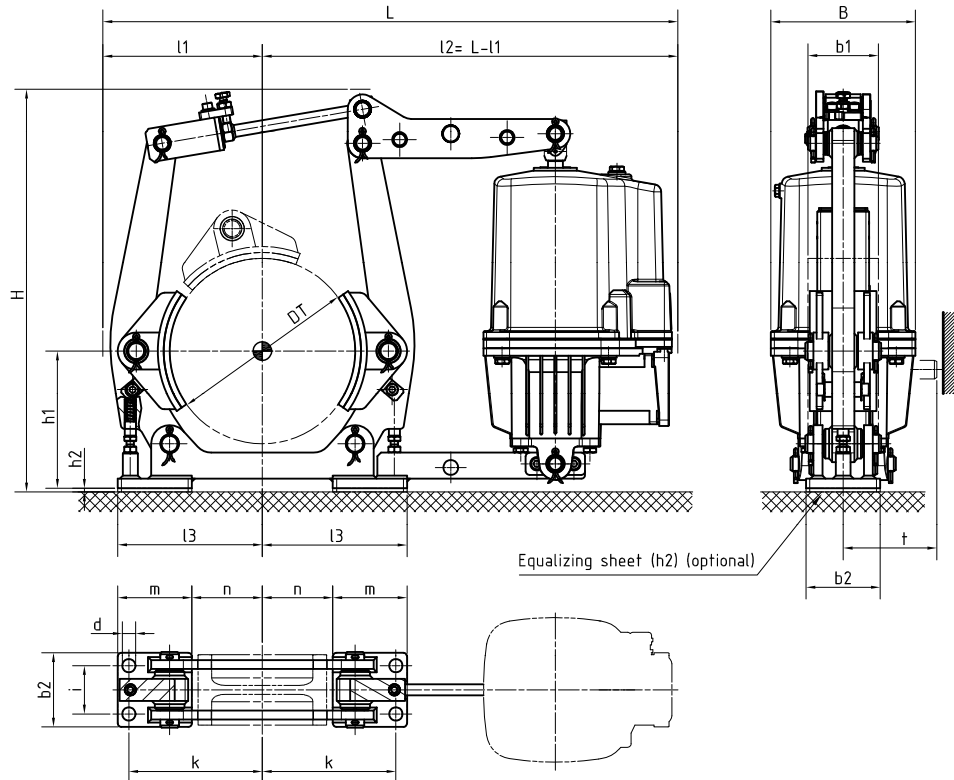
Type IBTR

- For thruster with integrated brake and regulating spring (c- and d-spring) to develop a lowering- and regulating brake action
- Brake closes in case of power failure (Fail-Safe Principle)



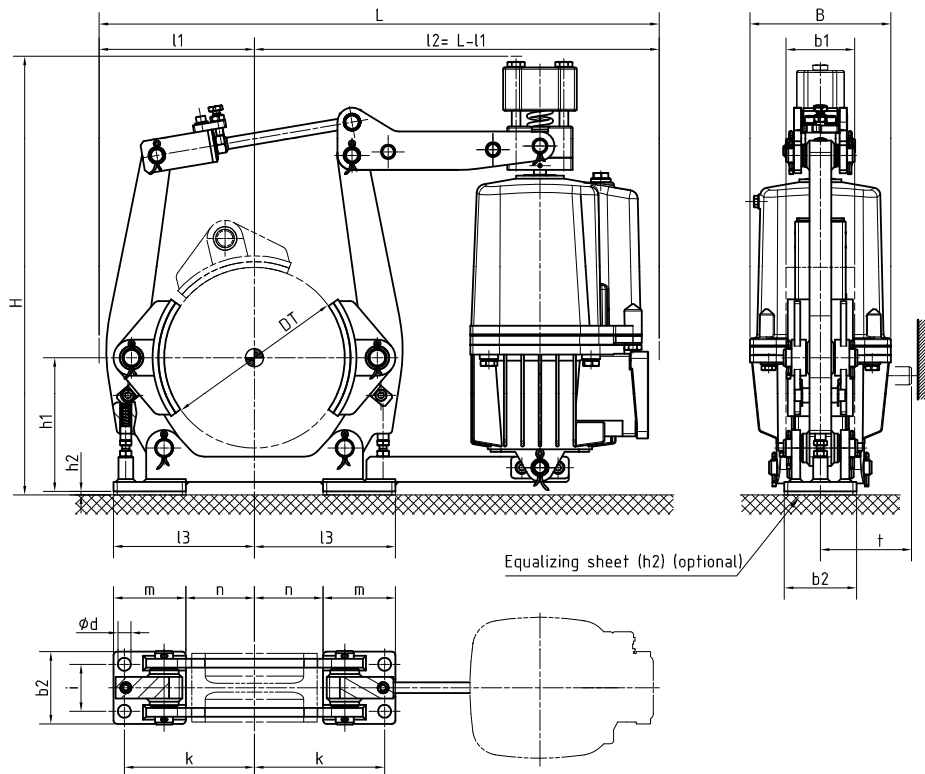
Type IBTSL

- Braking by spring power
- Lifting by thruster
- Torque adjustable
- Brake closes in case of power failure (Fail-Safe Principle)
- Other lifting devices available on request



DT mm	Thruster acc. to DIN 15 430	Brake torque ¹⁾ Nm for $\mu = 0,4$	B	b1	b2	d	H	h1	h2	L	l1	l3	i	k	m	n	t	kg ²⁾	
																			mm
200	Ed 230-50 c	260	160	75	80	14	475	155	5	645	180	175	55	145	90	85	105	21	
	Ed 300-50 c	400								640									
250L	Ed 230-50 c	270	160	95	100	18	505	185	5	707	207	205	65	180	100	105	126	26	
	Ed 300-50 c	410								702									
250S	Ed 500-60 c	810	195	95	100	18	550	185	5	767	207	205	65	180	100	105	126	28	
	Ed 230-50 c	330								835									
315	Ed 300-50 c	510	160	118	110	18	615	225	5	830	260	245	80	220	110	135	151	44	
	Ed 500-60 c	1.010								870									
	Ed 800-60 c	1.670								870									
400L	Ed 230-50 c	340	160	150	140	22	680	270	10	962	322	300	100	270	120	180	190	58	
	Ed 300-50 c	520								957									
	Ed 500-60 c	1.030								997									
	Ed 800-60 c	1.710								997									
400S	Ed 1250-60 c	2.640	240	150	140	22	790	270	10	1052	322	300	100	270	120	180	190	85	
	Ed 2000-60 c	4.140																	
500	Ed 500-60 c	1.250	195	190	180	22	840	330	10	1195	395	360	130	325	140	220	235	120	
	Ed 800-60 c	2.070								1185									
	Ed 1250-60 c	3.300								1185									
	Ed 2000-60 c	5.170								1185									
630	Ed 1250-60 c	3.300	240	236	220	27	1020	410	10	1340	470	445	170	400	160	285	285	175	
	Ed 2000-60 c	5.180																	
710	Ed 3000-60 c	7.370	265	265	240	27	1110	460	10	1485	530	500	190	450	180	320	320	225	
	Ed 1250-60 c	3.720																	
	Ed 2000-60 c	5.840																	
	Ed 3000-60 c	8.310																230	

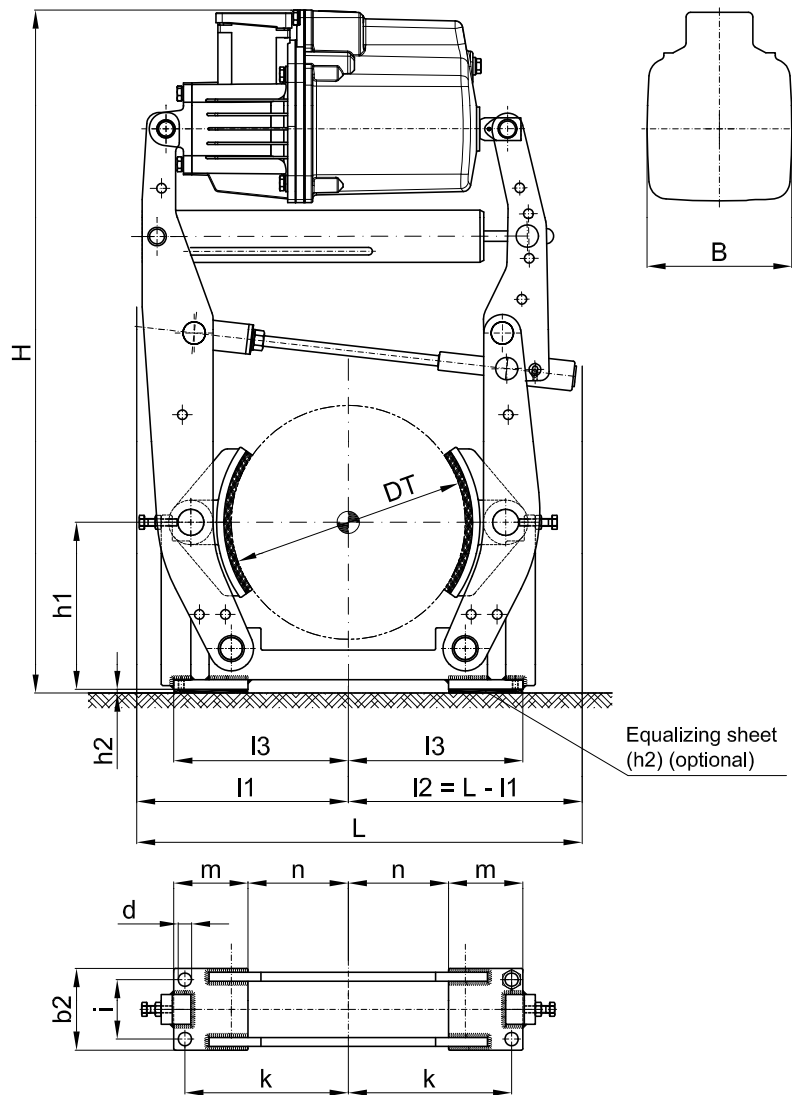
- Friction coefficient can be subject to fluctuations caused by different operating factors such as sliding speed, surface pressure, thermal impact, condition of friction surface, brake drum material and ambient conditions. If calculating brake sizes DIN 15 434 should be used as reference. The stated brake torque values are for dynamic braking at operating speed till 25 m/sec. and brake drums made of cast iron or spherical graphite iron. The operating temperature should not exceed 200 °C.
- Without thruster.



Equalizing sheet (h2) (optional)

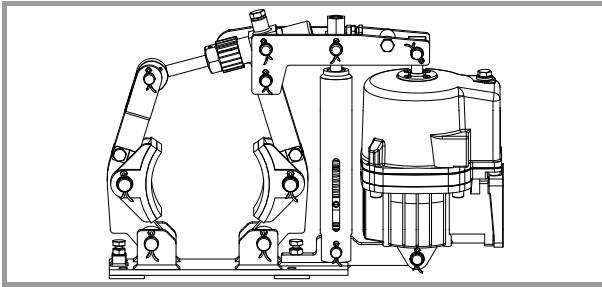
DT mm	Thruster acc. to DIN 15 430	Brake torque ¹⁾ Nm for $\mu = 0,4$	B	b1	b2	d	H	h1	h2	L	l1	l3	i	k	m	n	t	kg ²⁾
										Mm								
200	Ed 230 - 50	90	160	75	80	14	475	155	5	645	180	175	55	145	90	85	105	21
	Ed 300 - 50	130								640								
250L	Ed 230 - 50	115	160	95	100	18	505	185	5	707	207	205	65	180	100	105	126	26
	Ed 300 - 50	165								702								
250S	Ed 500 - 60	288	195	95	100	18	550	185	5	767	207	205	65	180	100	105	126	28
315	Ed 230 - 50	140	160	118	110	18	615	225	5	835	260	245	80	220	110	135	151	44
	Ed 300 - 50	210								830								
	Ed 500 - 60	360	195				610	870	46									
	Ed 800 - 60	590																
400L	Ed 230 - 50	180	160	150	140	22	680	270	10	962	322	300	100	270	120	180	190	58
	Ed 300 - 50	265								957								
	Ed 500 - 60	455	195				670	997	60									
	Ed 800 - 60	755																
400S	Ed 1250 - 60	1210	240	150	140	22	790	270	10	1052	322	300	100	270	120	180	190	85
	Ed 2000 - 60	1900																
500	Ed 500 - 60	580	195	190	180	22	840	330	10	1195	395	360	130	325	140	220	235	120
	Ed 800 - 60	945								1185								
	Ed 1250 - 60	1510	240				175											
	Ed 2000 - 60	2390																
630	Ed 1250 - 60	1900	240	236	220	27	1020	410	10	1340	470	445	170	400	160	285	285	175
	Ed 2000 - 60	3010																180
	Ed 3000 - 60	4440																
710	Ed 1250 - 60	2150	265	265	240	27	1110	460	10	1485	530	500	190	450	180	320	320	225
	Ed 2000 - 60	3400																230
	Ed 3000 - 60	5010																

- Friction coefficient can be subject to fluctuations caused by different operating factors such as sliding speed, surface pressure, thermal impact, condition of friction surface, brake drum material and ambient conditions. If calculating brake sizes DIN 15 434 should be used as reference. The stated brake torque values are for dynamic braking at operating speed till 25 m/sec. and brake drums made of cast iron or spherical graphite iron. The operating temperature should not exceed 200 °C.
- Without thruster.

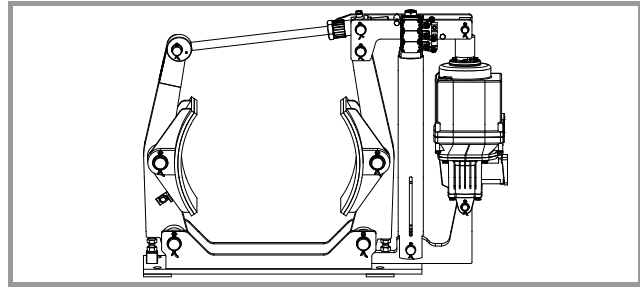


DT mm	Thruster acc. to DIN 15 430	Brake torque ¹⁾ Nm for $\mu = 0,4$	B	b1	b2	d	H	h1	h2	L	l1	l3	i	k	m	n	t	kg ²⁾	
Mm																			
200	Ed 230 - 50	50 - 300	160	75	80	14	695	155	5	440	210	165	55	145	80	85	105	21	
	Ed 300 - 50	50 - 420																	
250L	Ed 230 - 50	50 - 300	160	95	100	18		185	5				65	180	90	105	126	26	
	Ed 300 - 50	50 - 425																	
250S	Ed 500 - 60	120 - 800	195																28
	Ed 230 - 50	80 - 375																	
315	Ed 300 - 50	80 - 525	160	118	110	18		225	5	285	235	80	220	100	135	151			44
	Ed 500 - 60	120 - 940																	
	Ed 800 - 60	120 - 1610																	
400	Ed 230 - 50	120 - 375	160	150	140	22		270	10	670	335	290	100	270	110	180	190		58
	Ed 300 - 50	120 - 525																	
	Ed 500 - 60	200 - 940																	
	Ed 800 - 60	200 - 1610																	
			195				990												60

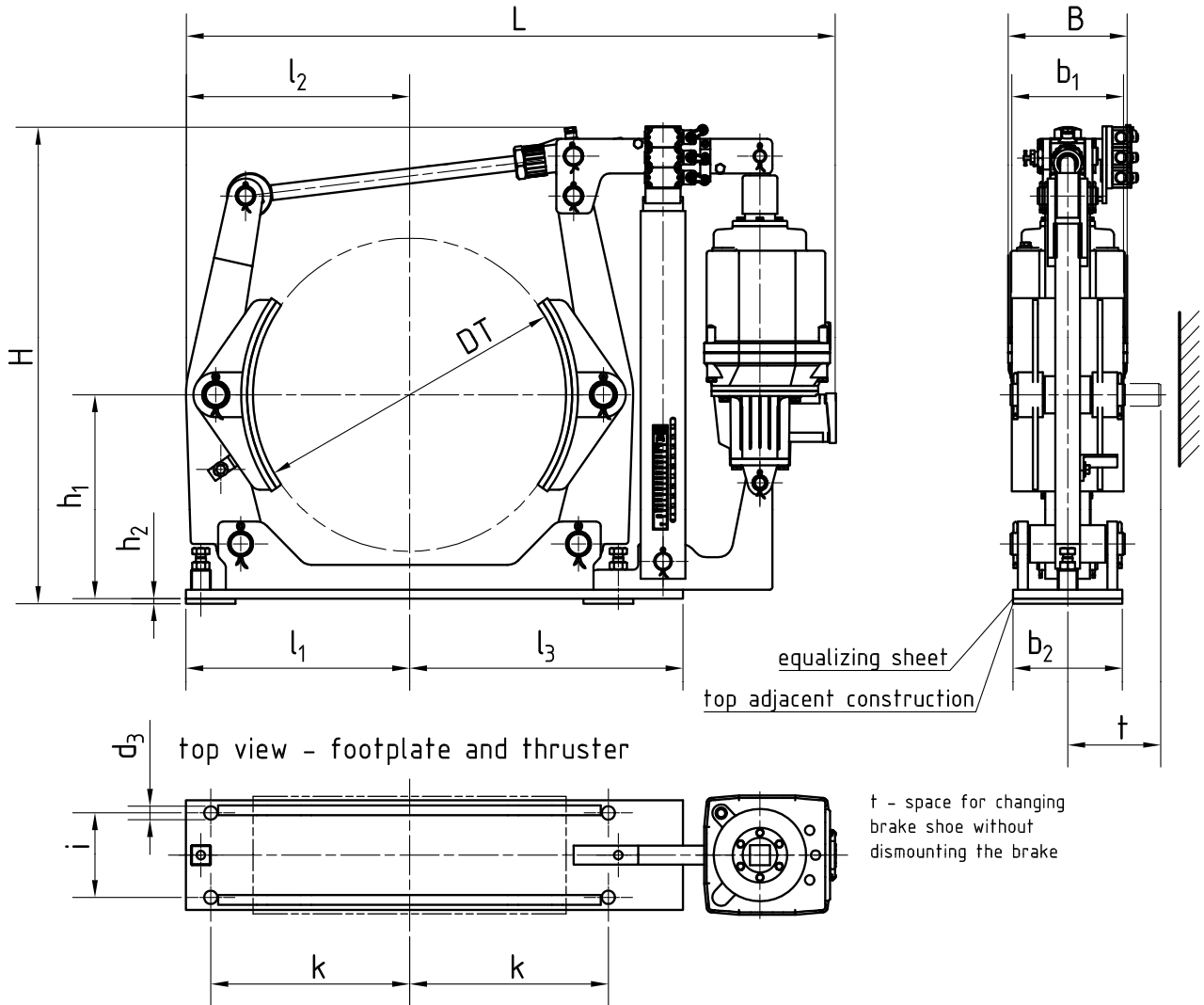
- Friction coefficient can be subject to fluctuations caused by different operating factors such as sliding speed, surface pressure, thermal impact, condition of friction surface, brake drum material and ambient conditions. If calculating brake sizes DIN 15 434 should be used as reference. The stated brake torque values are for dynamic braking at operating speed till 25 m/sec. and brake drums made of cast iron or spherical graphite iron. The operating temperature should not exceed 200 °C.
- Without thruster.



Type 200-30H1



Type 630-201H1

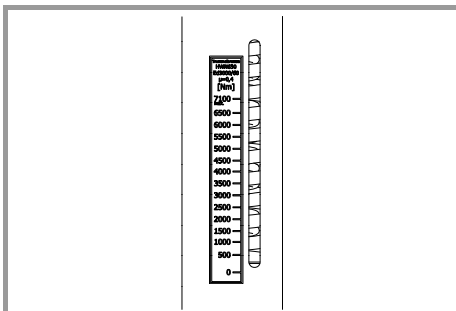
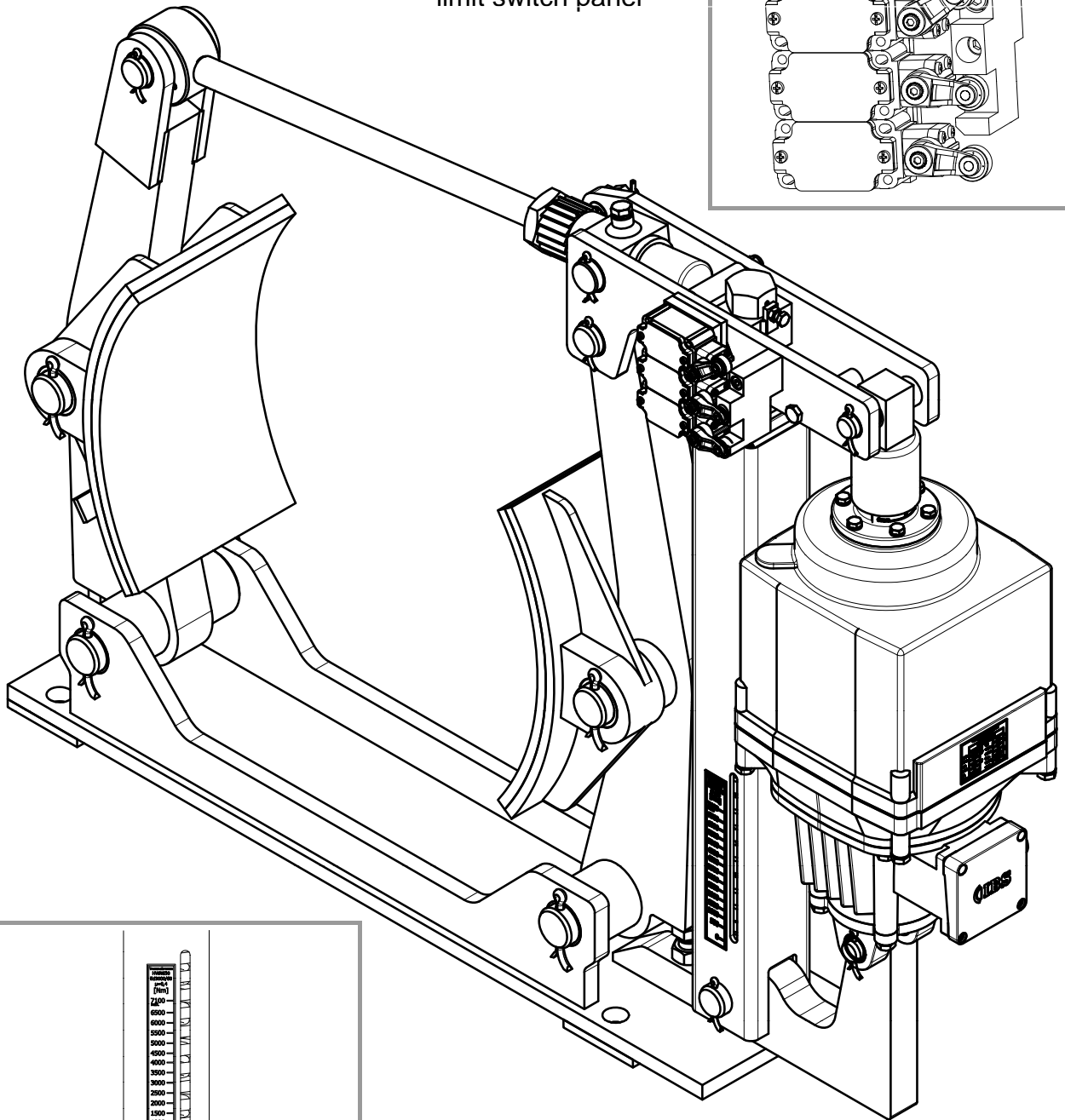
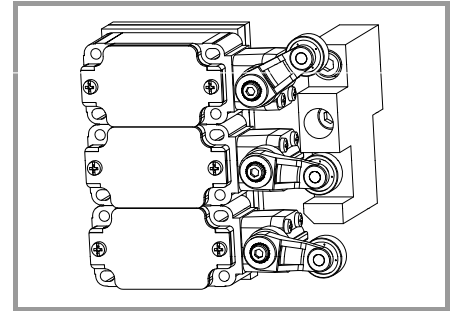


t - space for changing
brake shoe without
dismantling the brake

Dimensions [mm]

Type	DT	B	b1	b2	d3	H	h1	h2	L	l1	l2	l3	i	k	t
200- 30 H1	200	160	75	80	14	480	155	5	630	170	175	200	55	145	110
250- 50 H1	250	195	95	100	18	550	185	5	747	200	205	250	65	180	140
315- 80 H1	315	195	118	120	18	620	225	5	847	250	255	300	80	220	173
400-121 H1	400	240	150	150	22	780	270	10	975	295	310	355	100	270	220
500-121 H1	500	240	190	180	22	815	330	10	1095	370	370	450	130	325	280
630-201 H1	630	240	236	220	27	1000	410	10	1303	450	450	530	170	400	350
710-301 H1	710	240	265	250	27	1100	460	10	1423	500	515	600	190	450	395

optional equipment
- limit switch panel

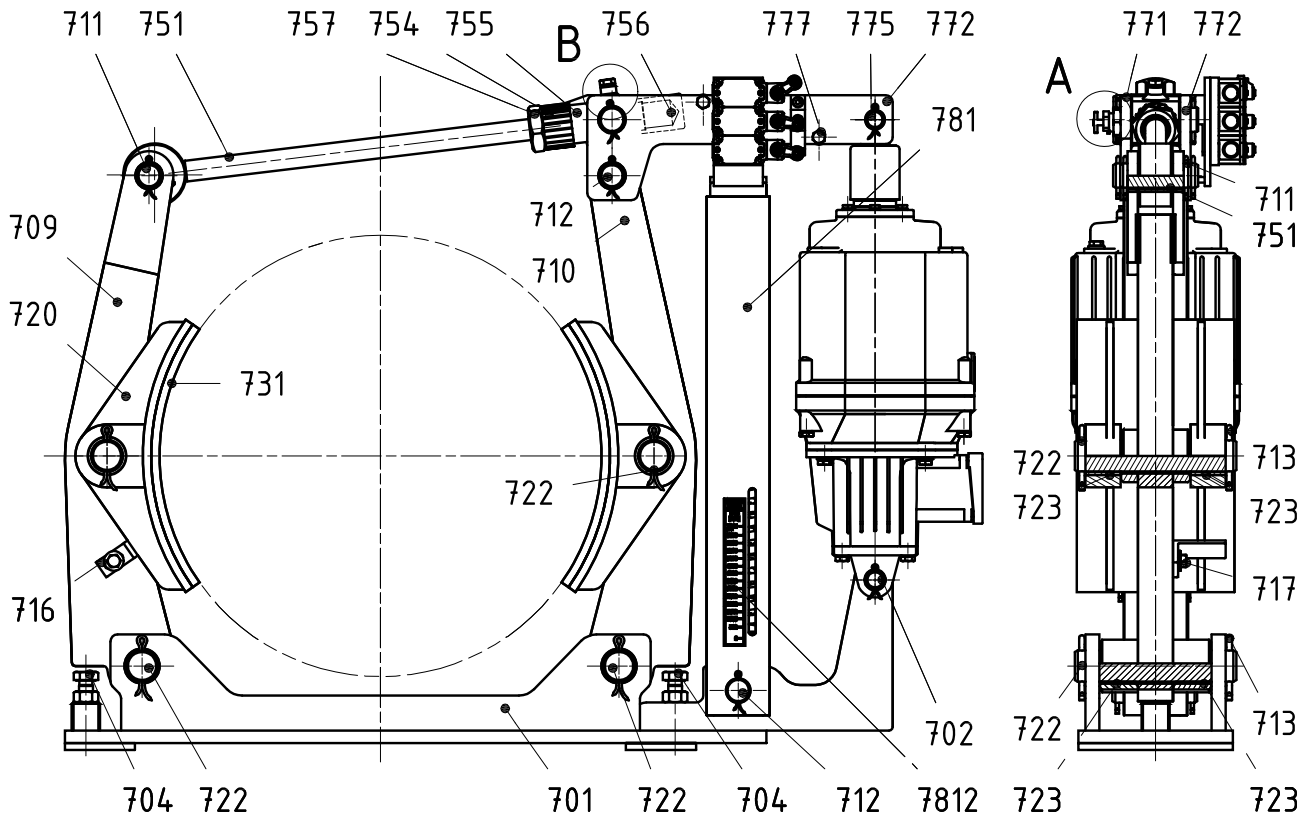


brake torque scale in [Nm]

Technical Data

Type	DT mm	Thruster acc. to DIN 15430	Brake torque at $\mu = 0,4$ Nm	Mass ¹⁾ kg
200- 30 H1	200	Ed 300 – 120	44 – 395	20
250- 50 H1	250	Ed 500 – 120	80 – 720	29
315- 80 H1	315	Ed 800 – 120	61 – 736	43
400-121 H1	400	Ed 1250 – 120	175 – 2096	75
500-121 H1	500	Ed 1250 – 120	152 – 2584	135
630-201 H1	630	Ed 2000 – 120	324 – 5184	195
710-301 H1	710	Ed 3000 – 120	373 – 8213	240

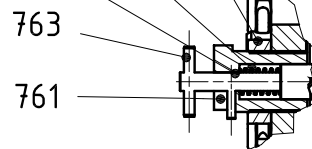
1) Without thruster.



- 701 Foot plate
- 702 Bolt
- 704 Setting screw with nut
- 709 Brake lever "A"
- 710 Brake lever "B"
- 711 Tension bolt
- 712 Pivot pin
- 713 Cotter pin
- 716 Leaf spring
- 717 Screw with nut
- 720 Brake shoe
- 722 Bearing bolt
- 723 Bearing bushing
- 731 Brake lining
- 751 Vertical screw
- 752 Traverse
- 7521 Coil spring

- 7522 Clamping pad
- 7523 Pressing screw
- 754 Gear
- 755 Distance bushing
- 756 Protective cap
- 757 Adjustment nut
- 761 Drive carrier housing
- 762 Notched slide
- 7621 Coil spring
- 763 Handle bolt
- 764 Lock nut
- 771 Knee lever front
- 772 Knee lever back
- 775 Bolt
- 777 Screw
- 781 Spring housing
- 7812 Scale

762 7621 764

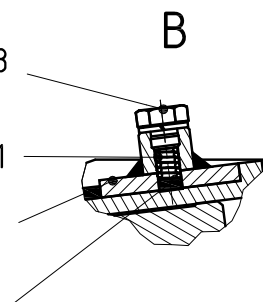


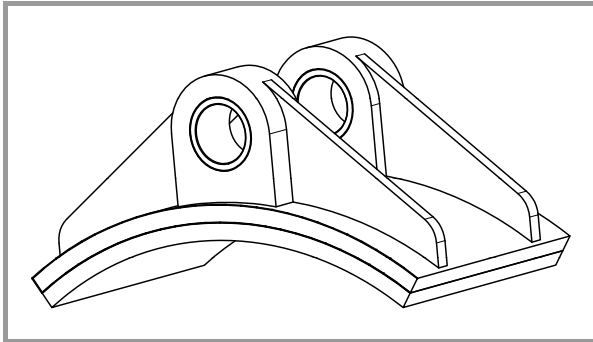
7523

7521

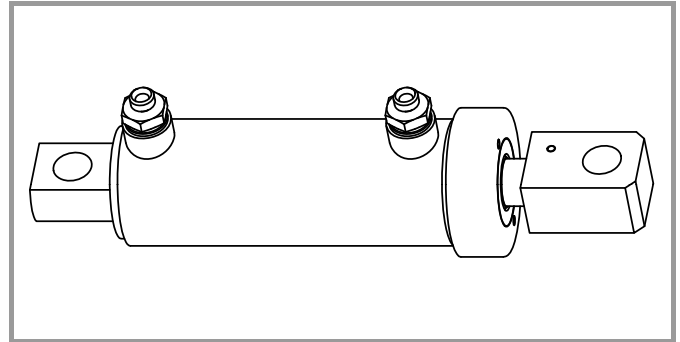
752

7522

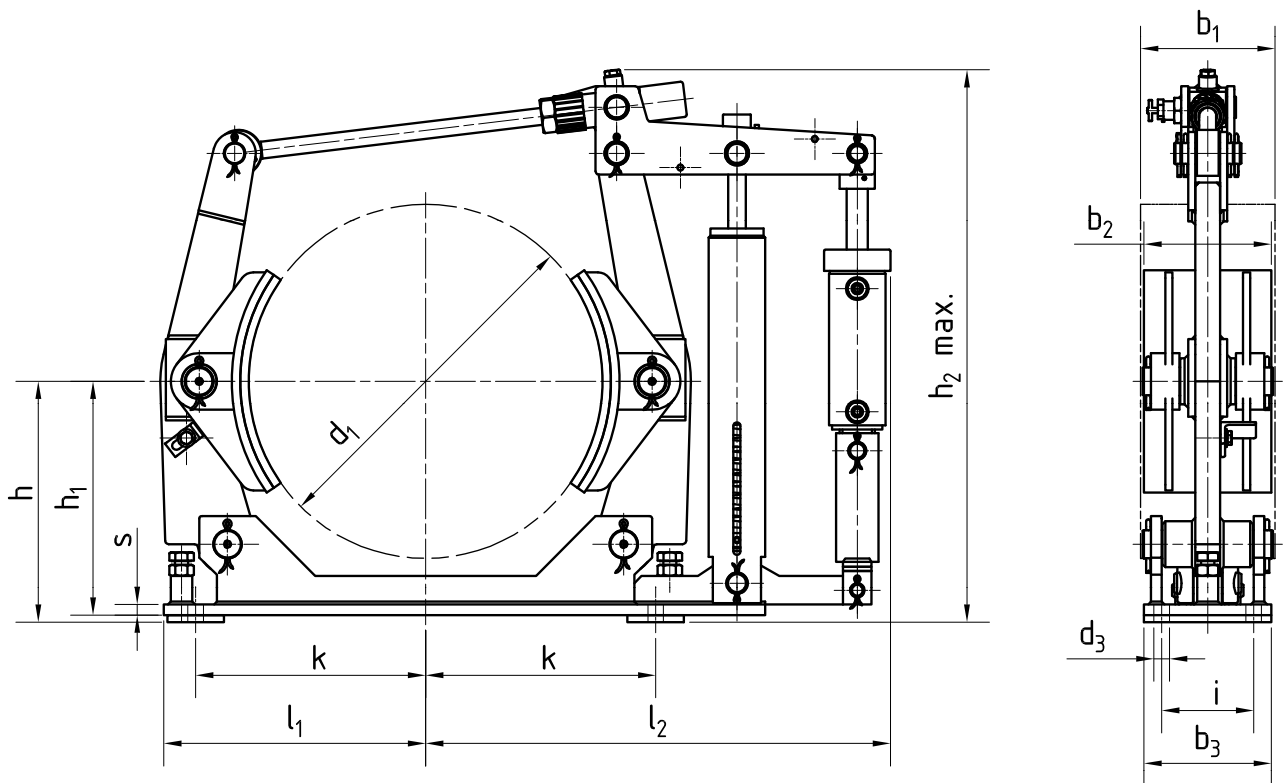




brake shoe D500

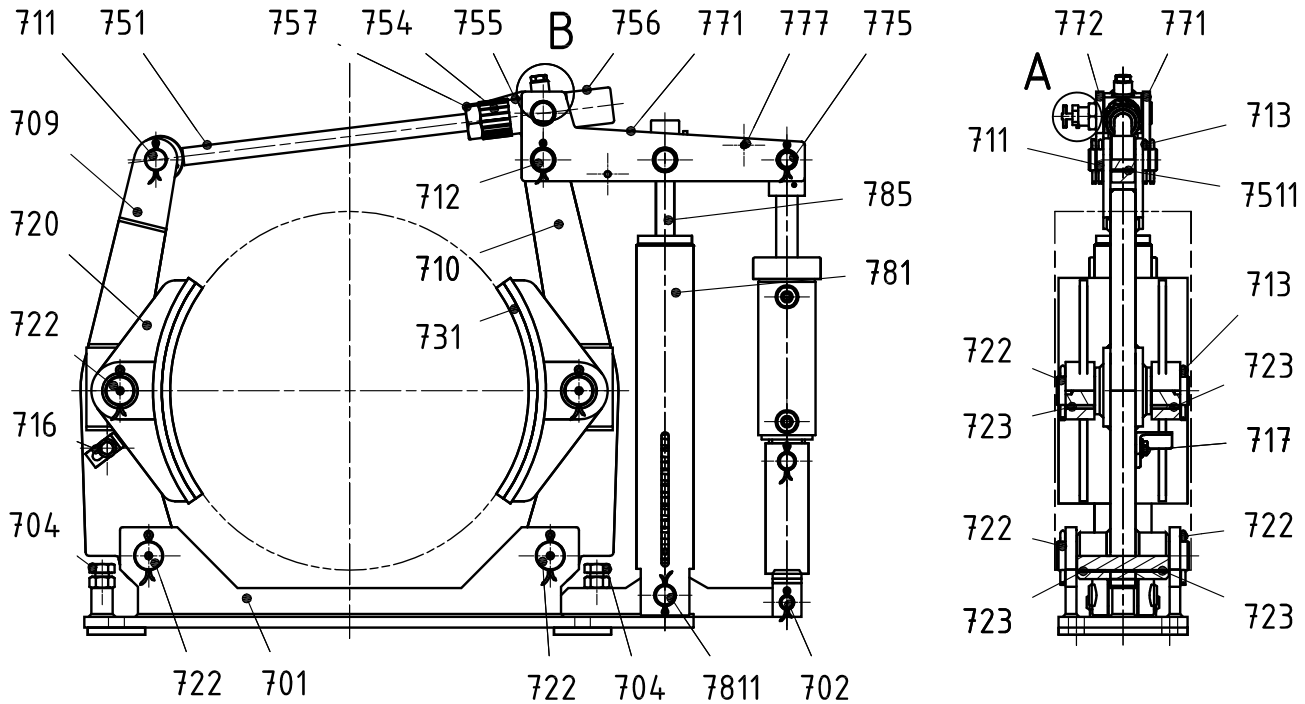


cylinder 73TX

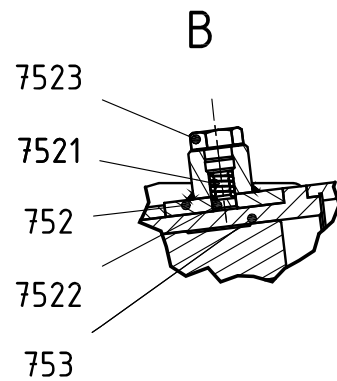
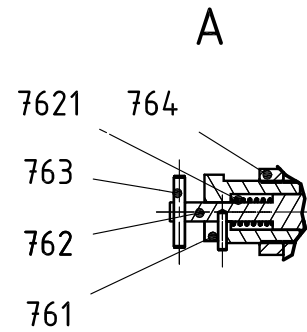


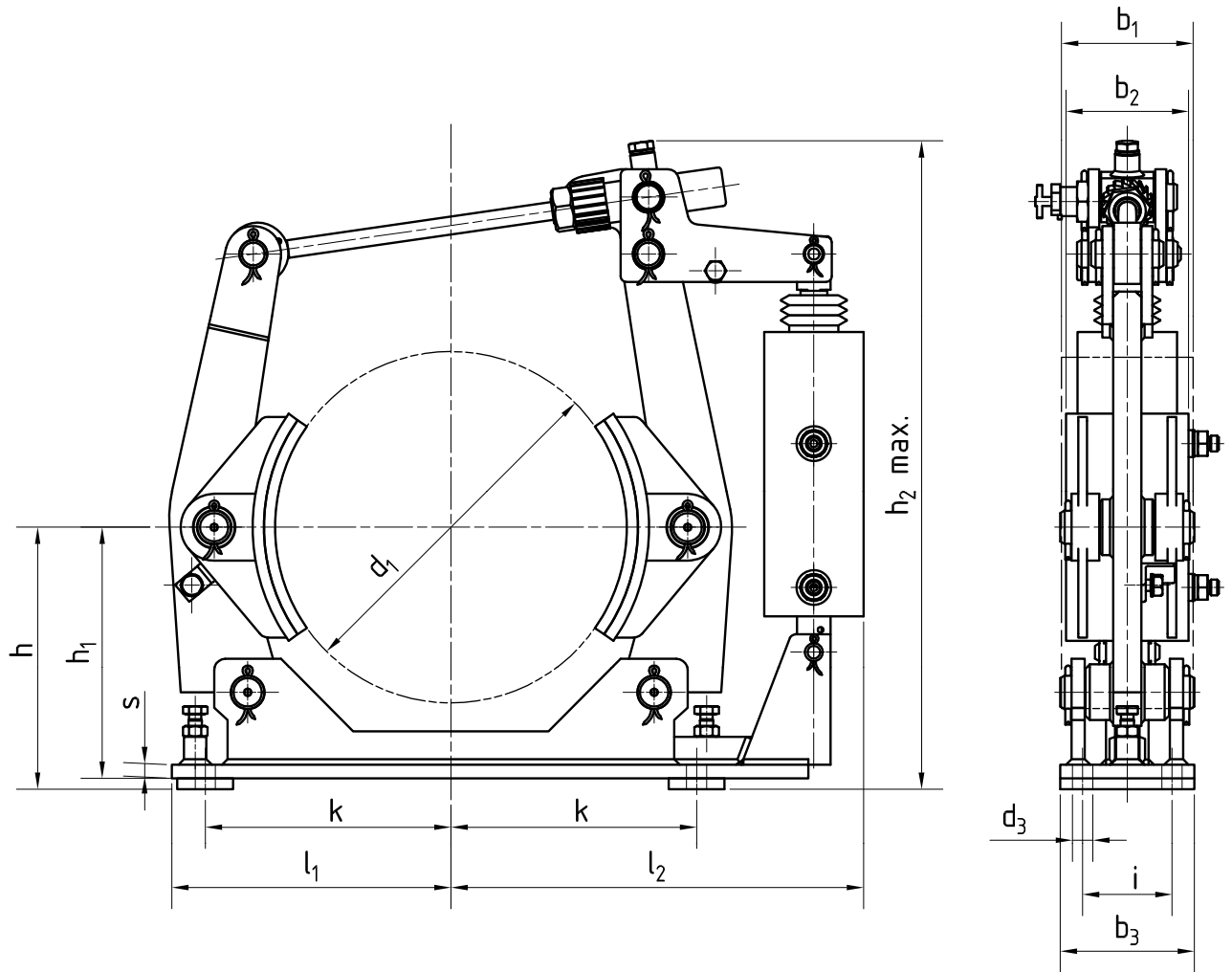
Dimensions [mm]

Type	Brake torque at $\mu=0,4$ Nm	d_1	b_1	b_2	b_3	d_3	h	h_1	$h_2^{2)}$	i	k	l_1	l_2	s	Weight kg
mm															
19/200/700 TX	30 - 280	200	75	70	80	14	160	155	470	55	145	165	350	8	18
19/250/700 TX	80 - 590	250	95	90	100	18	190	185	500	65	180	205	420	10	23
19/315/700 TX	100 - 750	315	118	110	120	18	230	225	610	80	220	250	465	12	48
19/315/71 TX	190 - 1270												485		
19/400/700 TX	180 - 950	400	150	140	150	22	280	275	715	100	270	305	560	12	72
19/400/71 TX	470 - 2530												570		
19/500/700 TX	280 - 1100	500	190	180	180	22	340	330	850	130	325	370	635	15	95
19/500/71 TX	280 - 2880												650		
19/500/73 TX	410 - 4470												660		
19/630/71 TX	560 - 3060	630	236	225	230	27	420	410	980	170	400	460	725	20	190
19/630/73 TX	560 - 4700												735		
19/630/74 TX	850 - 7060												740		
19/710/73 TX	1050 - 4940	710	265	255	250	27	470	460	1120	190	450	510	855	20	225
19/710/74 TX	1760 - 7410												860		
19/710/73 TX/12	1470 - 5880												965		
19/710/74 TX/12	2230 - 8940												970		



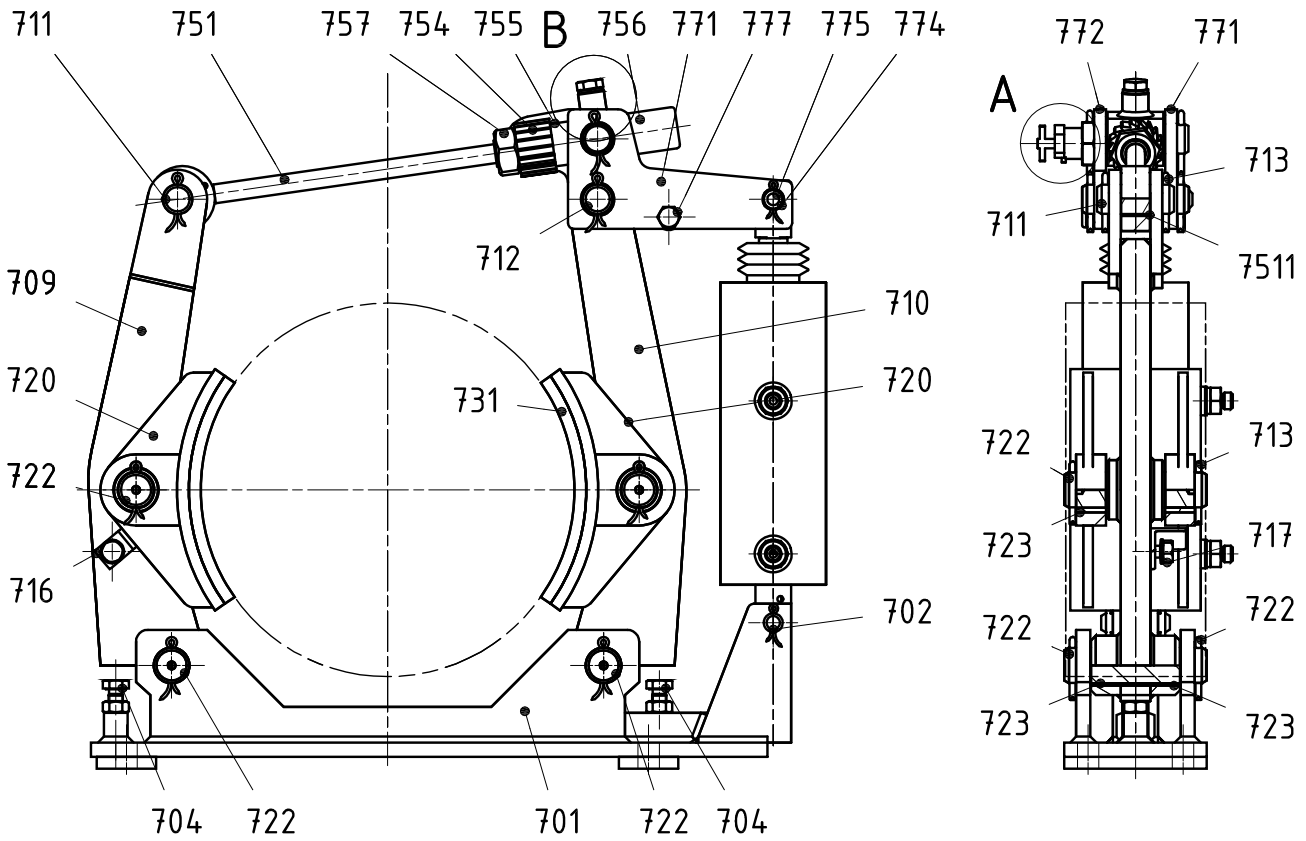
- | | |
|----------------------------|---------------------------|
| 701 Foot plate | 753 Spindle nut |
| 702 Bolt | 754 Gear |
| 704 Setting screw with nut | 755 Distance bushing |
| 709 Brake lever "A" | 756 Protective cap |
| 710 Brake lever "B" | 757 Adjustment nut |
| 711 Tension bolt | 761 Drive carrier housing |
| 712 Pivot pin | 762 Notched slide |
| 713 Cotter pin | 7621 Coil spring |
| 716 Leaf spring | 763 Handle bolt |
| 717 Screw with nut | 764 Lock nut |
| 720 Brake shoe | 771 Knee lever front |
| 722 Bearing bolt | 772 Knee lever back |
| 723 Bearing bushing | 775 Bolt |
| 731 Brake lining | 777 Screw |
| 751 Vertical screw | 781 Spring housing |
| 7511 Bearing bushing | 7811 Bolt |
| 752 Traverse | 785 Adjustment spindle |
| 7521 Coil spring | |
| 7522 Clamping pad | |
| 7523 Pressing screw | |



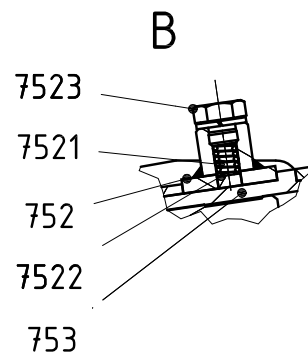
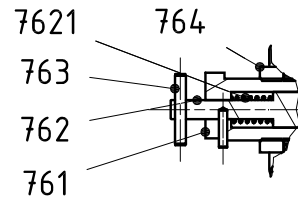


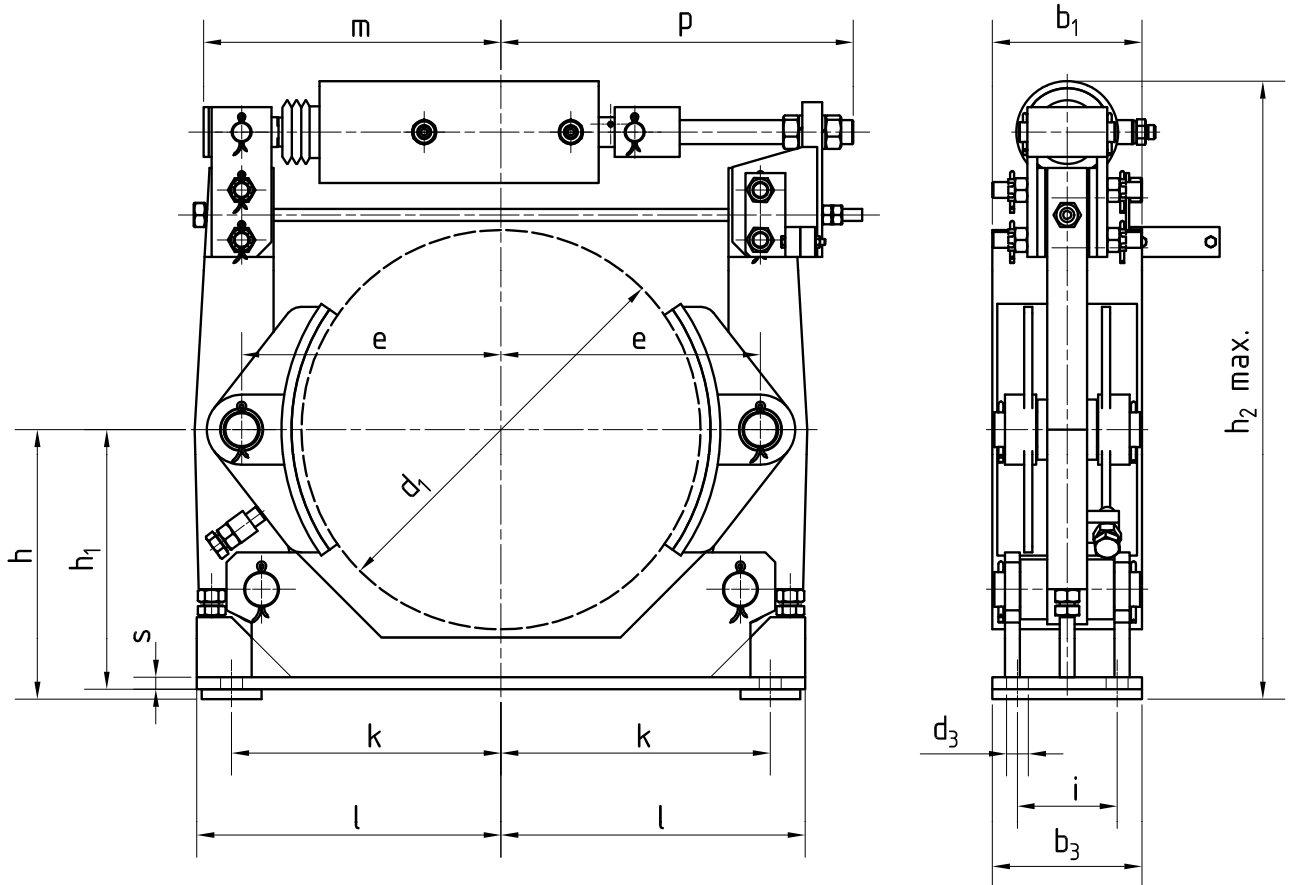
Dimensions [mm]

Type	Brake torque at $\mu=0,4$ Nm	mm													Weight kg
		d ₁	b ₁	b ₂	b ₃	d ₃	h	h ₁	h ₂ ²⁾	i	k	l ₁	l ₂	s	
18/200/0	260	200	75	70	80	14	160	155	470	55	145	165	268	8	18
18/200/1	380														
18/250/0	340														
18/250/1	470	250	95	90	100	18	190	185	500	65	180	205	325	10	23
18/250/2	650														
18/315/0	440	315	118	110	120	18	230	225	610	80	220	250	395	12	48
18/315/1	600														
18/315/2	820														
18/315/3	1270														
18/400/2	820	400	150	140	150	22	280	275	715	100	270	305	465	12	72
18/400/3	1150														
18/400/4	1650														
18/400/5	2540														
18/500/3	1340														
18/500/4	1900	500	190	180	180	22	340	330	850	130	325	370	575	15	95
18/500/5	2940														
18/500/6	4580														
18/630/5	3080	630	236	225	230	27	420	410	980	170	400	460	650	20	190
18/630/6	4820														
18/630/7	7060														
18/710/6	5090														
18/710/7	7060	710	265	255	250	27	470	460	1120	190	450	510	750	20	225
18/710/8	9750														



- | | |
|----------------------------|---------------------------|
| 701 Foot plate | 7522 Clamping pad |
| 702 Bolt | 7523 Pressing screw |
| 704 Setting screw with nut | 753 Spindle nut |
| 709 Brake lever "A" | 754 Gear |
| 710 Brake lever "B" | 755 Distance bushing |
| 711 Tension bolt | 756 Protective cap |
| 712 Pivot pin | 757 Adjustment nut |
| 713 Cotter pin | 761 Drive carrier housing |
| 716 Leaf spring | 762 Notched slide |
| 717 Screw with nut | 7621 Coil spring |
| 720 Brake shoe | 763 Handle grip |
| 722 Bearing bolt | 764 Lock nut |
| 723 Bearing bushing | 771 Knee lever front |
| 731 Brake lining | 772 Knee lever back |
| 751 Vertical screw | 775 Bolt |
| 7511 Bearing bushing | 777 Screw |
| 752 Traverse | |
| 7521 Coil spring | |



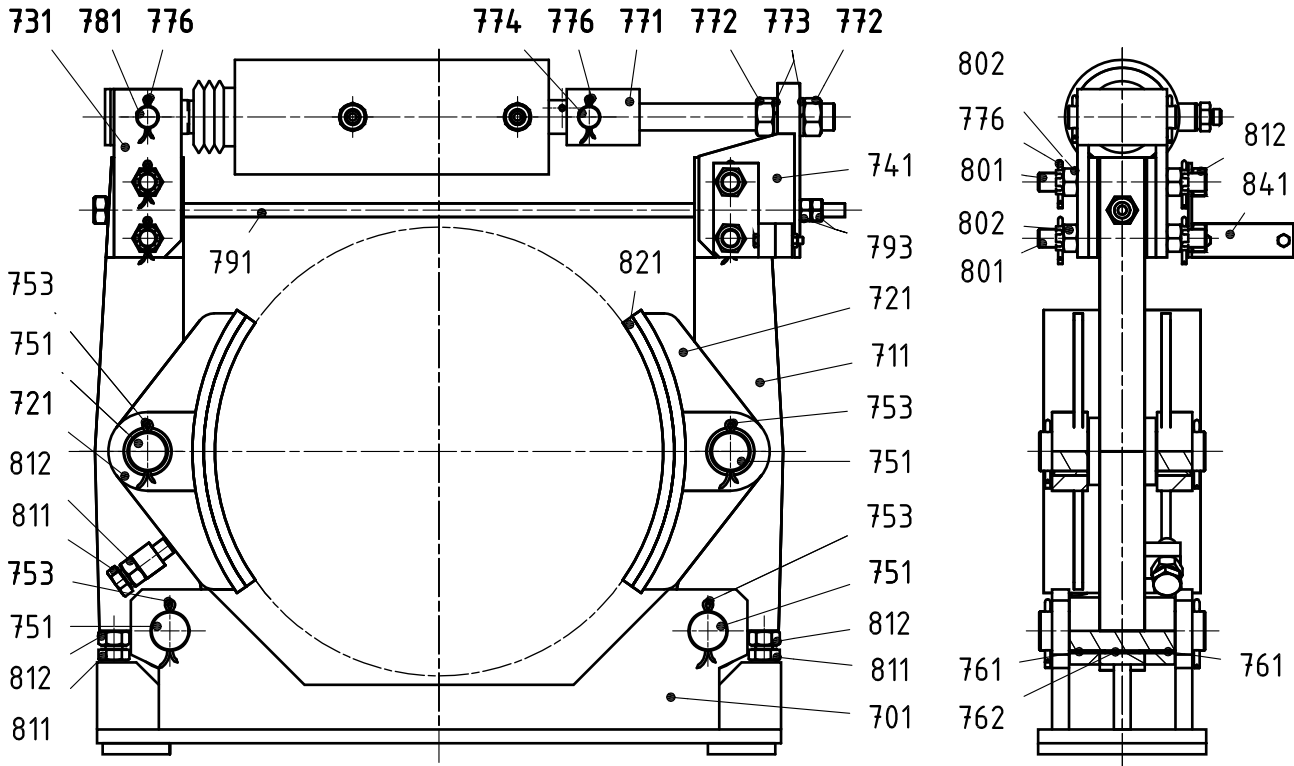


Dimensions [mm]

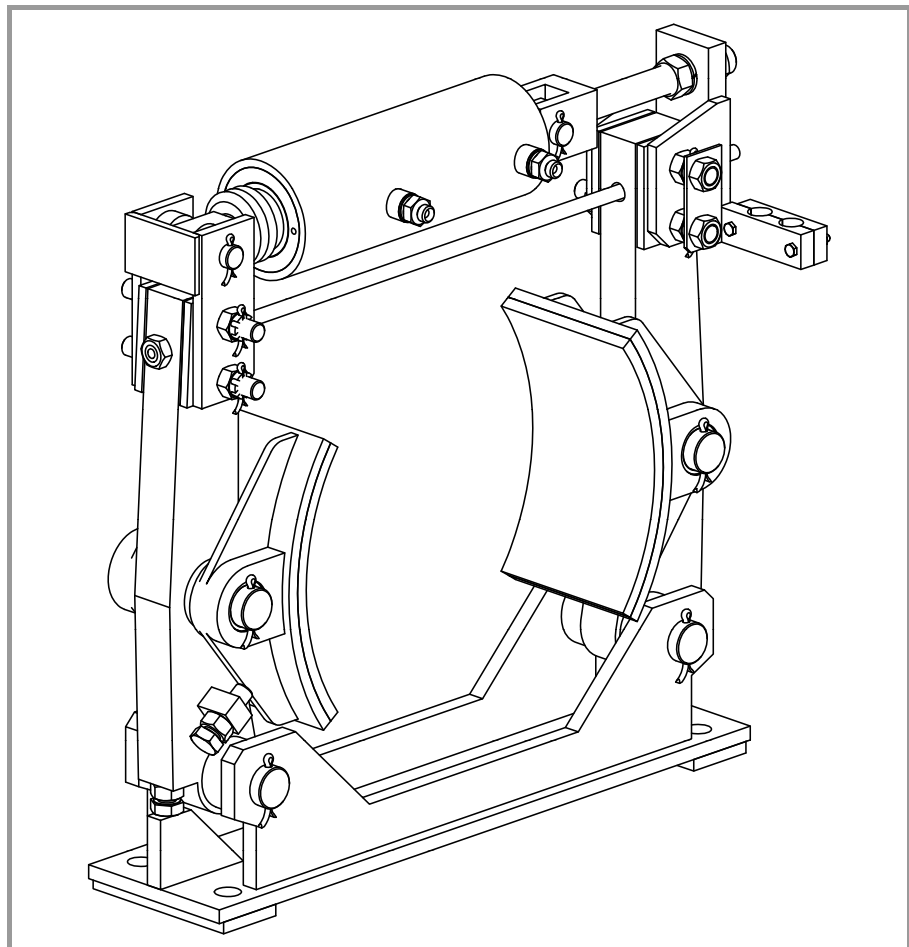
Type	d ₁	b ₁	b ₂	b ₃	d ₃	e	h	h ₁	h ₂	i	k	l	m	s	Weight kg
11/200	200	75	70	80	14	140	160	155	365	55	145	165	170	8	15,5
12/250	250	95	90	100	18	170	190	185	435	65	180	205	210	10	21,5
13/315	315	118	110	120	18	212	230	225	550	80	220	250	260	12	45,0
14/400	400	150	140	150	22	260	280	275	650	100	270	305	315	12	69,0
15/500	500	190	180	180	22	320	340	330	810	130	325	370	375	15	87,0
16/630	630	236	225	230	27	390	420	410	980	170	400	460	470	20	192,0
17/710	710	265	255	250	27	440	470	460	1100	190	450	510	520	20	213,0

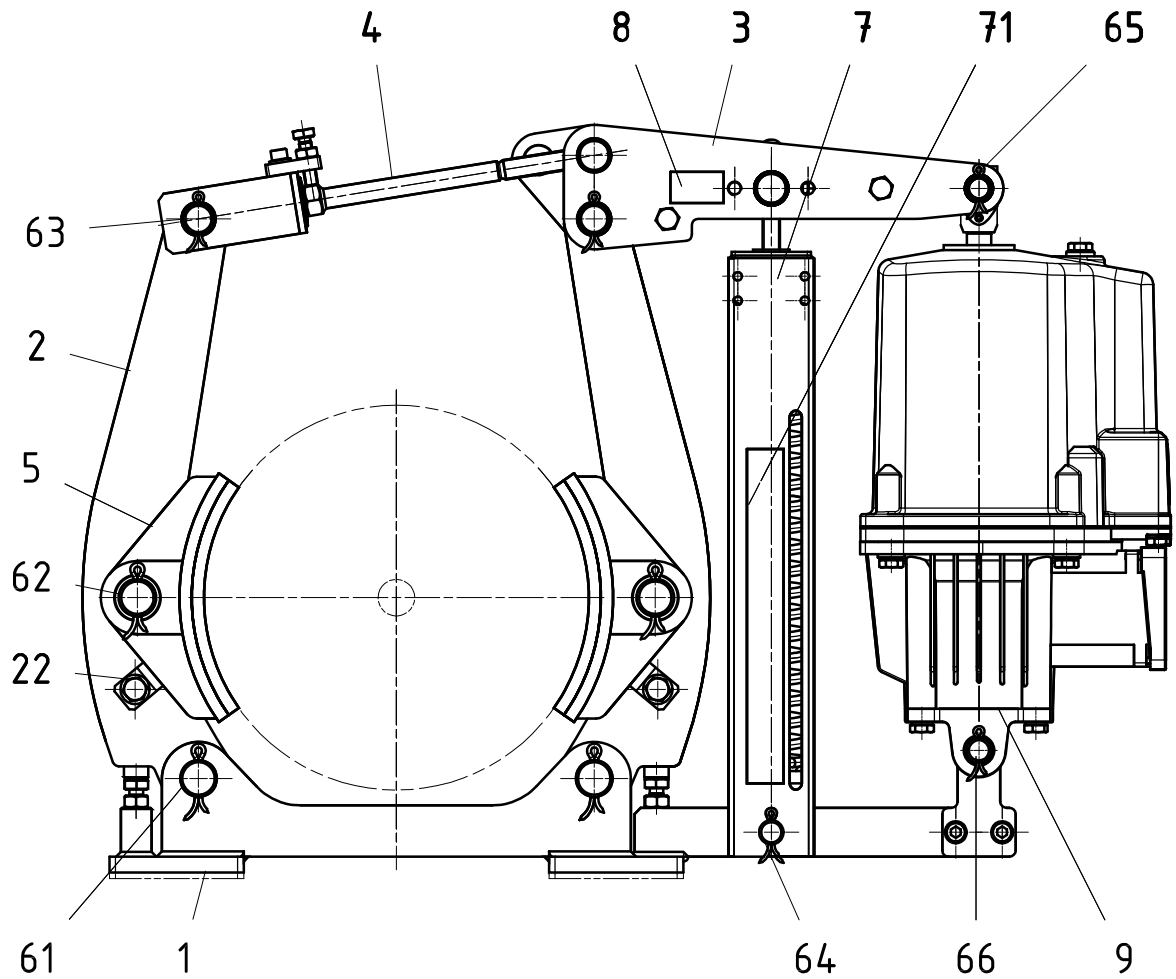
Brake torque „Mn“ and measure „p“ for mounting of different pressure oil cylinder

Brake drum Ø	200		250		315		400		500		630		710		
	p mm	Mn Nm	p mm	Mn Nm	p mm	Mn Nm	p mm	Mn Nm	p mm	Mn Nm	p mm	Mn Nm	p mm	Mn Nm	
Pressure oil cylinder	Size: 0	215	120	210	145										
	Size: 1	290	180	270	190	260	250								
	Size: 2			320	265	280	340	315	410						
	Size: 3					355	480	315	580						
	Size: 4					415	690	365	820	385	1050				
	Size: 5							400	1160	385	1500	470	1950		
	Size: 6									460	2200	470	2800	520	3100
	Size: 7									565	3000	490	3800	520	4250
Size: 8											615	5200	565	5800	

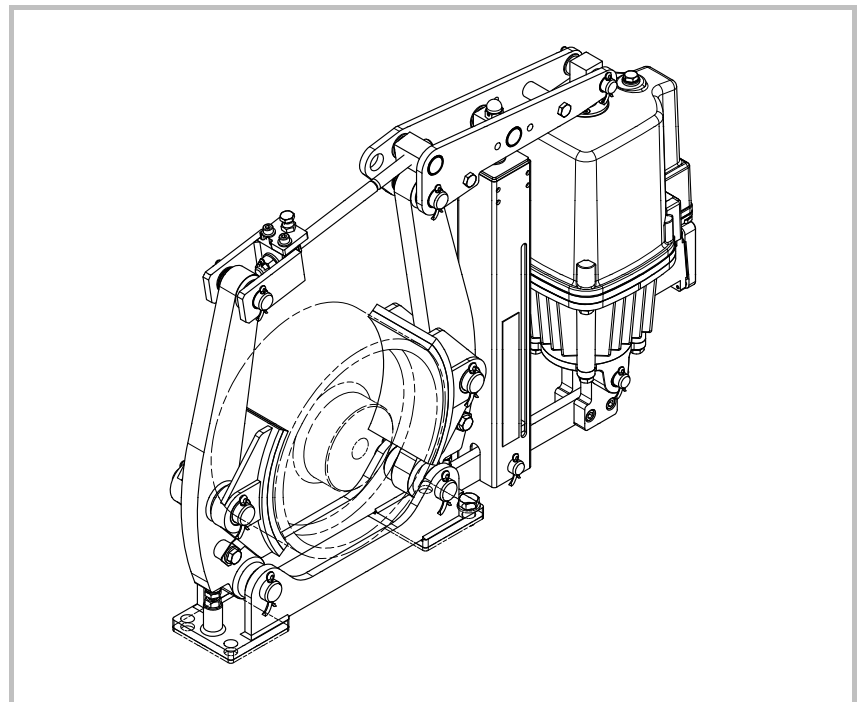


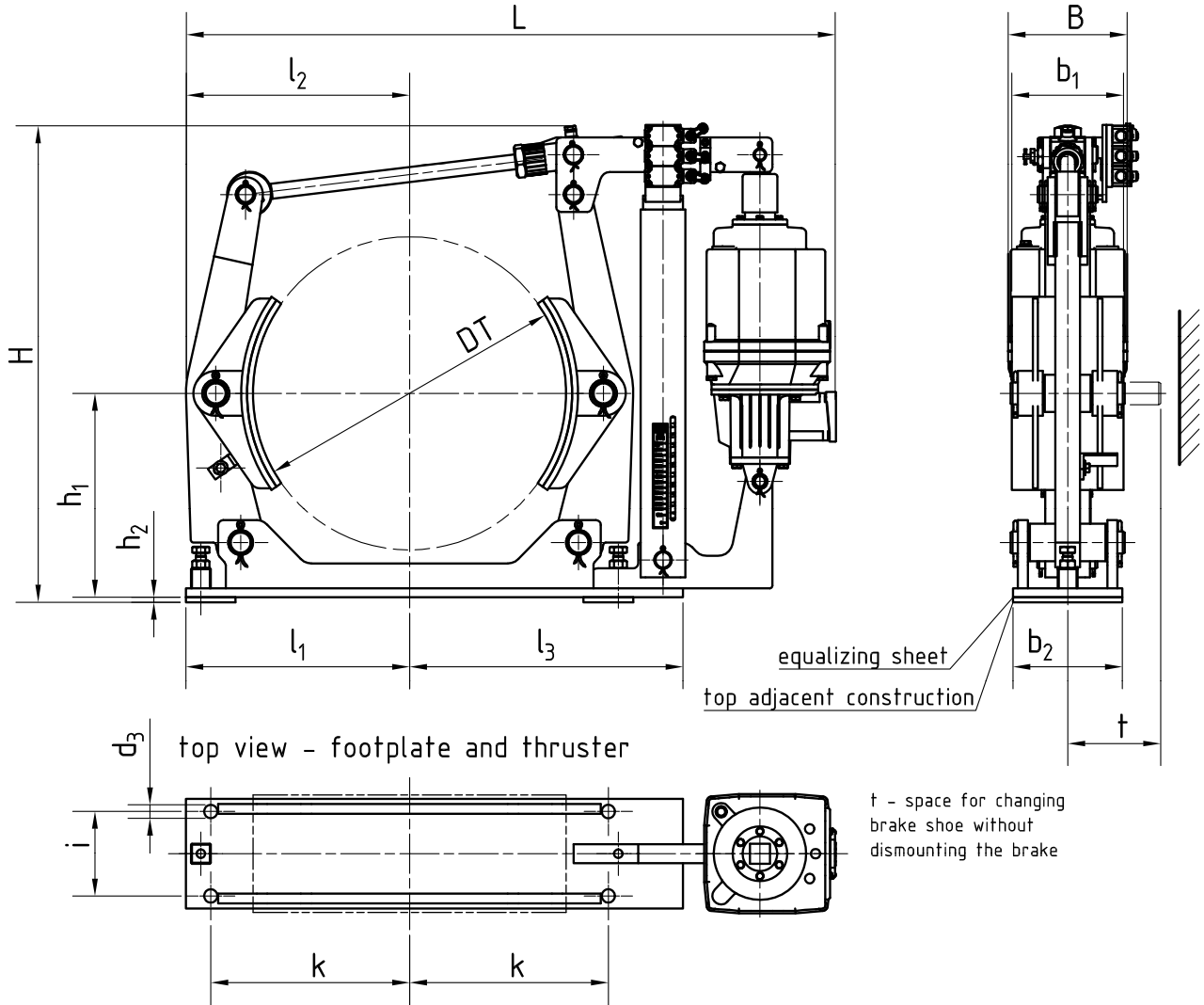
- 701 Foot plate
- 711 Brake lever
- 721 Brake shoe
- 731 Lever head "B"
- 741 Lever head "A"
- 751 Bearing bolt
- 753 Cotter pin
- 761 Bearing bushing
- 762 Distance bushing
- 771 Yoke
- 772 Nut
- 773 Spring washer
- 774 Cylinder bolt "A"
- 776 Cotter pin
- 781 Cylinder bolt "B"
- 791 Pull rod
- 793 Nut
- 801 Stud bolt
- 802 Crown nut
- 811 Adjustment screw
- 812 Nut
- 821 Break lining
- 841 Brake coupling holder





- 1 Foot plate
- 2 Brake lever
- 3 Knee lever unit complete
- 22 Brake shoe clamping spring with fastening parts
- 4 Pull rods complete
- 6 Brake shoe with lining
2 Bolts Pos. 61,62,63
- 7 1 Bolt Pos. 64,65,66
Spring unit
- 71 complete
- 8 Brake torque scale
- 9 Type plate
Thruster





t - space for changing brake shoe without dismantling the brake

Dimensions:

- | | | | |
|-------------------|-------------------|-------------------|-------------------|
| B: _____[mm] | DT: _____[mm] | i: _____[mm] | l_2 : _____[mm] |
| b_1 : _____[mm] | H: _____[mm] | K: _____[mm] | l_3 : _____[mm] |
| b_2 : _____[mm] | h_1 : _____[mm] | L: _____[mm] | t: _____[mm] |
| d_3 : _____[mm] | h_2 : _____[mm] | l_1 : _____[mm] | |

Requirements:

Sender:	Project:
	Person in charge:
	Date:

Necessary technical details:

for hoisting gear	for crane and trolley carriage
1. Driving mechanism group _____	1. Total weight _____ kg
2. Hoisting load _____ kg	2. Speed _____ m/s
3. Load of traverse or misc. _____ kg	3. Amount of driven and hoisting gears _____
4. Speed of hoist with load _____ m/min	4. Motor capacity per gear _____ kW
5. Lowering speed with load _____ m/min	5. Nominal speed of motor _____ 1/min
6. Amount of motors / brakes _____	6. Switching period _____ ED
7. Nominal capacity of motor _____ kW	7. Braking interval _____ 1/h
8. Nominal speed of motor _____ 1/min	8. Necessary breaking time _____ s
9. Switching period _____ ED	9. Mass moment of inertia _____ kgm ²
10. Brake intervals per hour _____ 1/h	10. Wind force _____ N
11. Mass moment of inertia _____ kgm ²	11. Force of gravity _____ N
12. Block and tackle ratio _____	12. Diameter of wheel / idler _____ m
13. Rope drum diameter _____ mm	13. Gear ratio _____
14. Gear/Transmission ratio _____	14. Rolling resistance _____

for continuous conveyer	for rotating systems
1. Conveying capacity _____ kg/h	1. Total mass moment of inertia _____ kgm ²
2. Conveying speed _____ m/s	2. Speed _____ 1/min
3. Number of drives _____	3. Amount of motors / brakes _____
4. Capacity of drive _____ kW	4. Drive capacity _____ kW
5. Speed of motor _____ 1/min	5. Brake intervals per hour _____ 1/h
6. Conveying heights _____ m	6. Necessary braking time _____ s
7. Conveying lengths _____ m	7. Static moment _____ Nm
8. Angle of incline / decline _____ °	
9. Mass moment of inertia _____ kgm ²	
10. Brake intervals per hour _____ 1/h	

