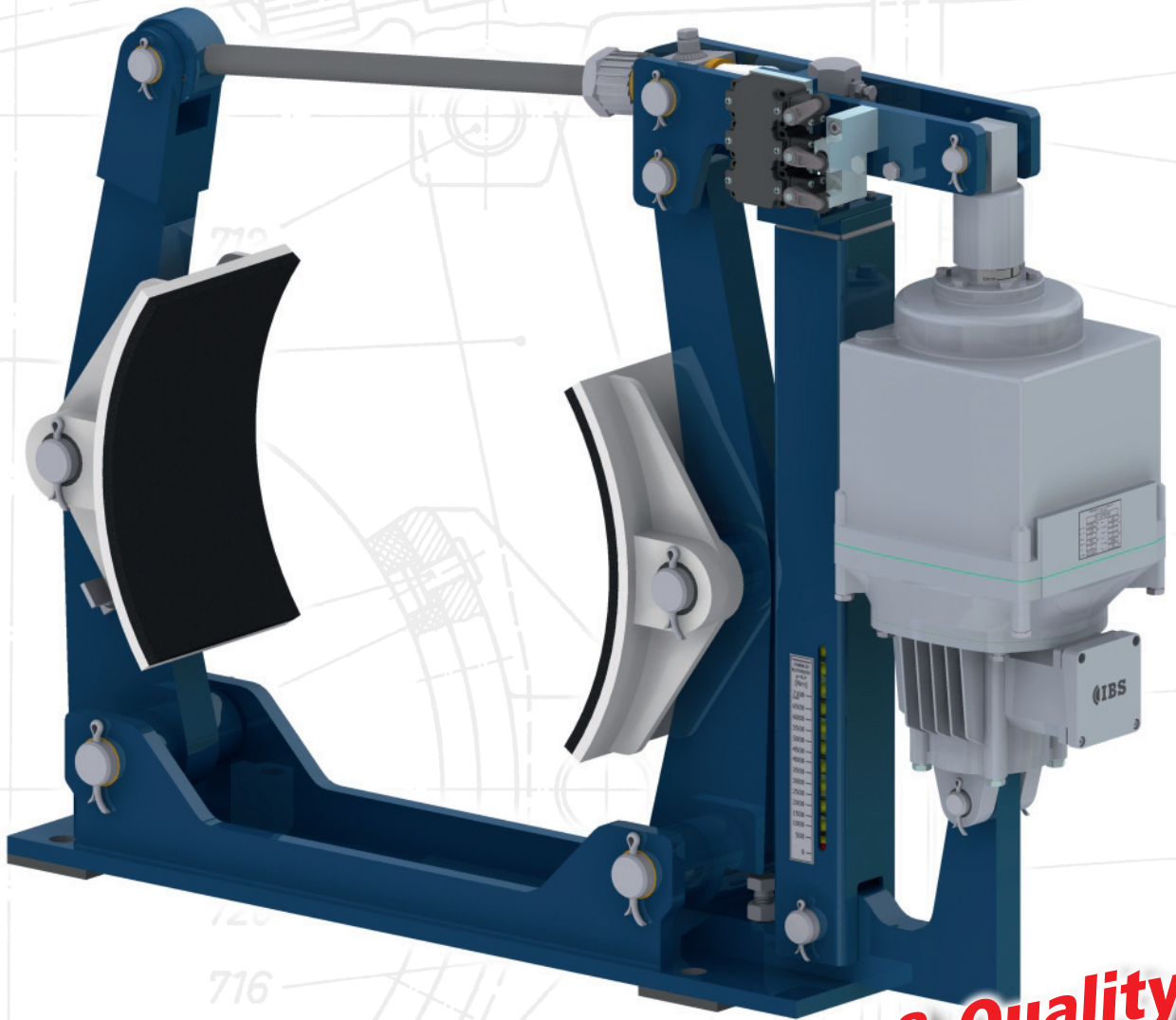




Intelligent Brake-Systems



**Know-How & Quality
from IBS**

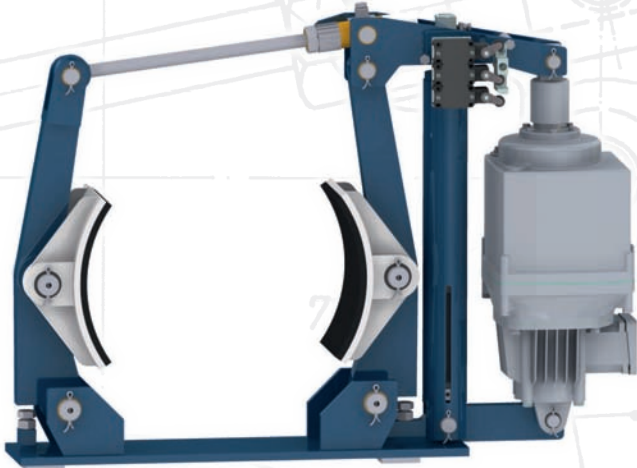
Brake for Steel Works and Heavy Duty Operation

Design acc. to steel works standard HWN 1964 and DIN 15 435



Brakes for Steel Works and Heavy Duty Operation

**INDUSTRIAL BRAKES · THRUSTERS · PRESSURE OIL UNITS · COUPLINGS · HYDRAULIC BUFFERS
CELLULAR BUFFERS · RAIL CLAMPS · STORM PROTECTION · SHEAVES · REPAIR · SERVICE**



IBS drum brakes conforming to steel works standard HWN 1964 are of a very robust and reliable construction

- ➔ Welded baseplate and brake lever
- ➔ Brake torque adjustable by means of an enclosed, lightly loaded spring
- ➔ Easy to read brake torque scale in millimetres with a plexiglass cover
- ➔ All bolts in rust and acid resistant steel
- ➔ All bearings maintenance free
- ➔ Screws nuts and split pins zinc galvanized
- ➔ Brake shoes according to DIN 15 435

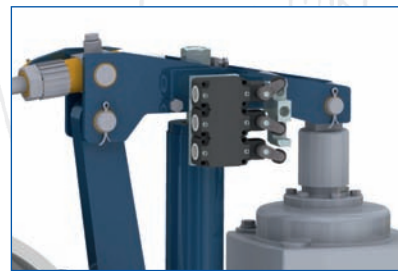
The brake is equipped with a very reliable, enclosed, automatic wear adjustment which guarantees that the brake force remains constant when the linings wear. The tension rod is made from non corroding material. The nut is made from brass. The trunion block is made from V2A (stainless steel) thus permanent, perfect operation of the automatic wear adjustment is guaranteed. For the extra aggressive environment of a steel works the ratchet and ratchet wheel are hardened.

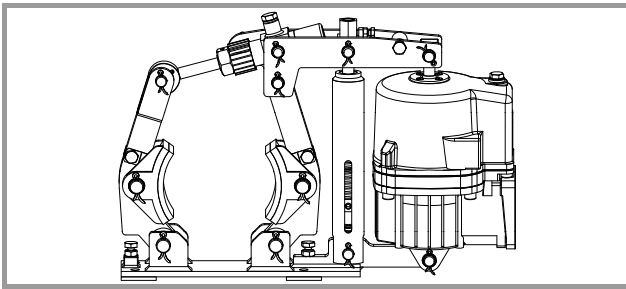
Supplementary Components

- ➔ Limit switch to indicate brake opened/closed
- ➔ Automatic wear adjustment (AVN)
- ➔ Hand lifting device
- ➔ Brake drum with hub and coupling

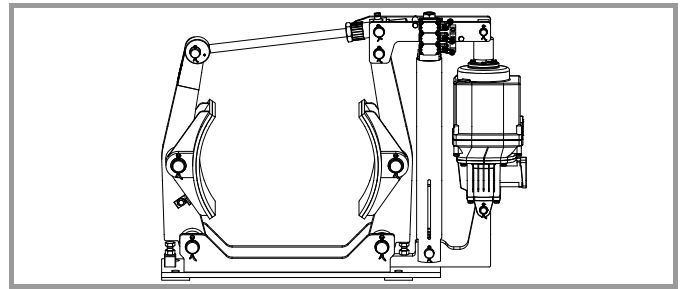
Thrusters

- ➔ Electrohydraulic thruster acc. to DIN 15 430
- ➔ Hydraulic cylinders
- ➔ Pneumatic cylinders
- ➔ Magnets

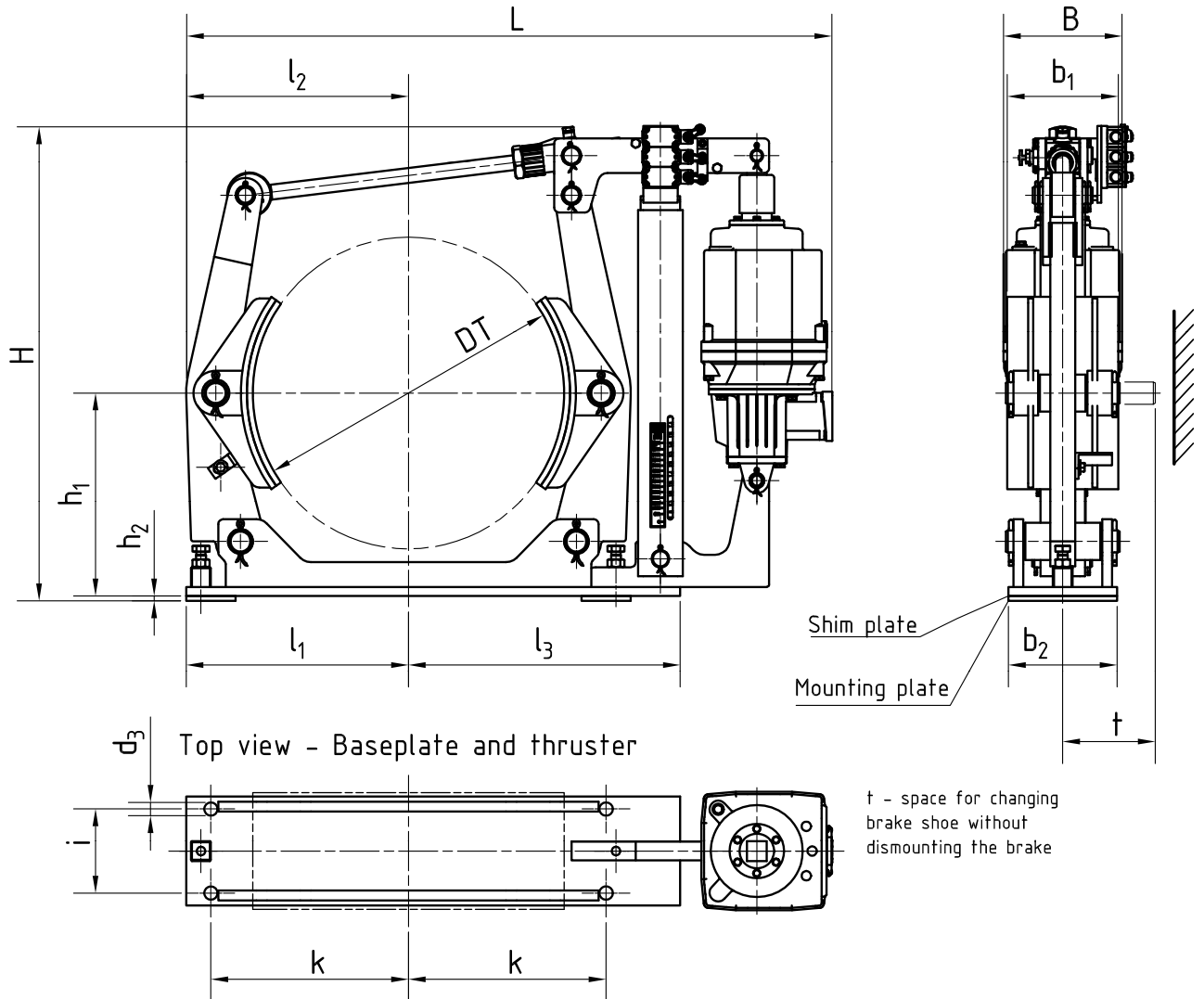




Type 200-30H1



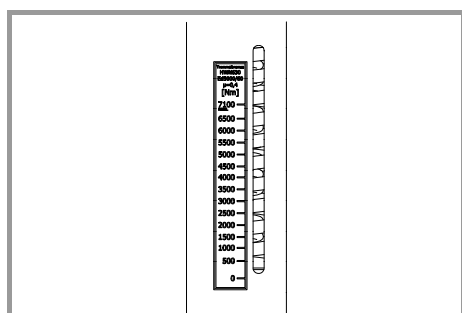
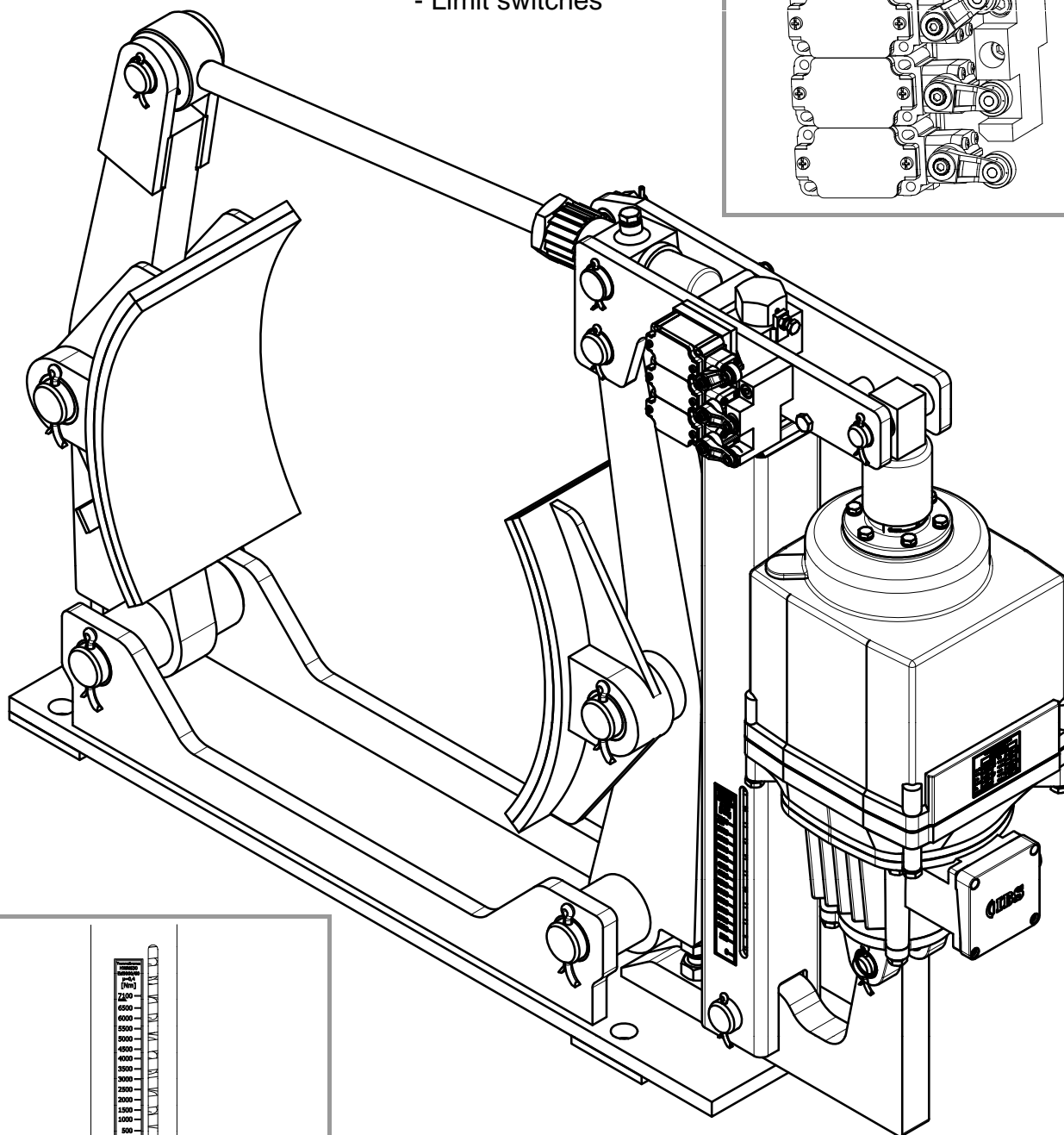
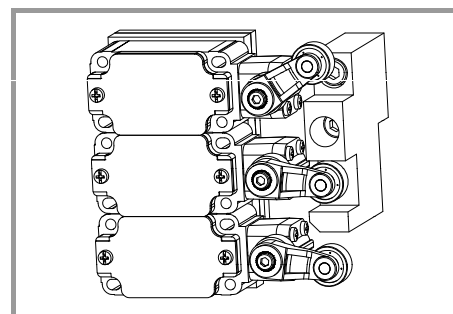
Type 630-201H1



Dimensions

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

Optional Equipment
- Limit switches

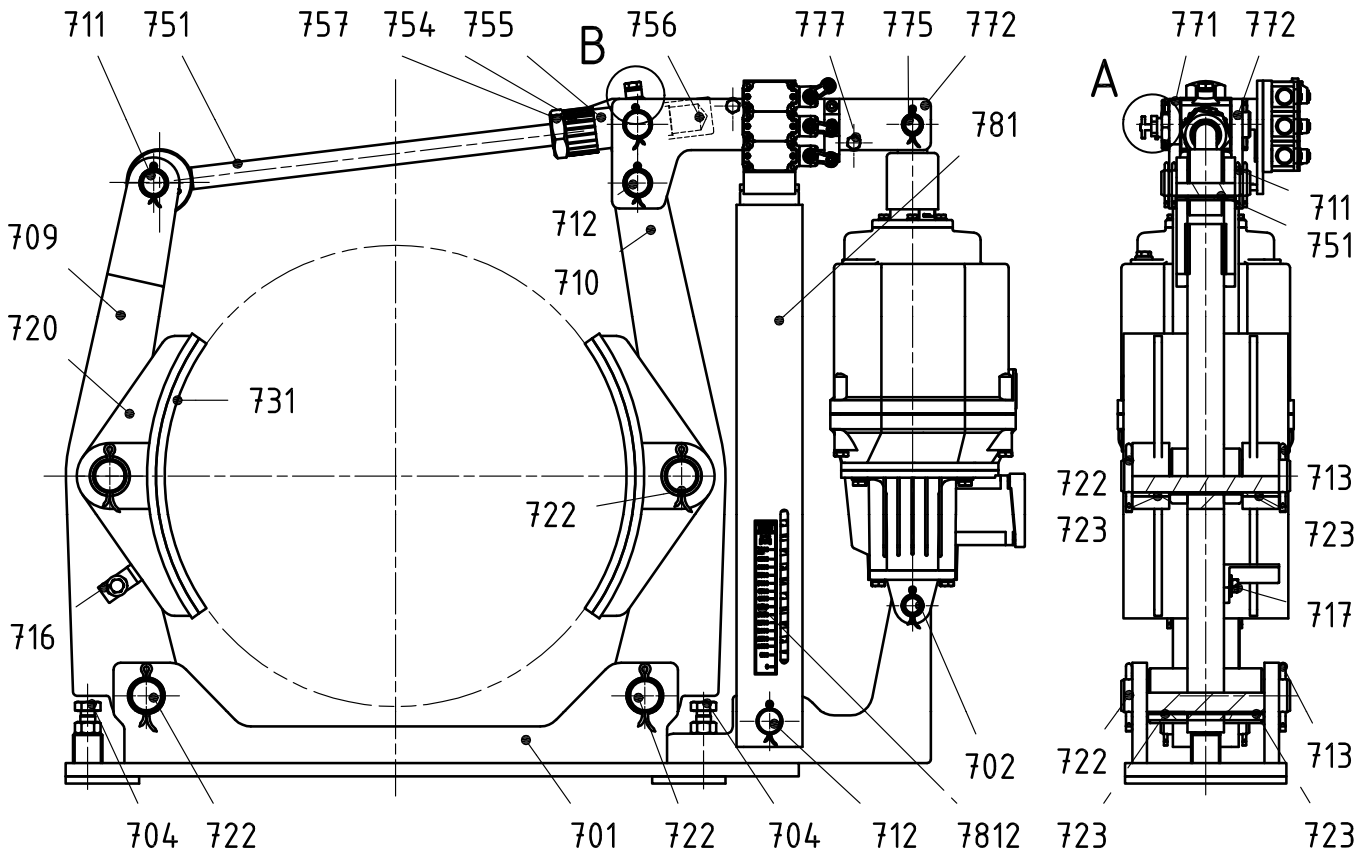


Brake torque scale in [Nm]

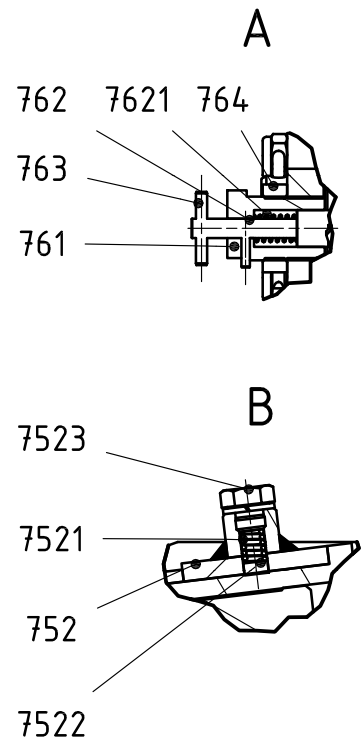
Technical data

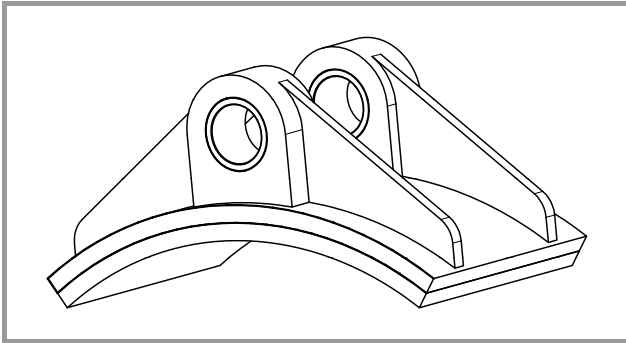
Type	DT mm	Thruster acc. to DIN 15430	Brake torque Nm by $\mu = 0,4$	Weight ¹⁾ kg
200- 30H1	200	Ed 300 – 120	44 – 395	20
250- 50H1	250	Ed 500 – 120	80 – 720	29
315- 80H1	315	Ed 800 – 120	61 – 736	43
400-121H1	400	Ed 1250 – 120	175 – 2096	75
500-121H1	500	Ed 1250 – 120	152 – 2584	135
630-201H1	630	Ed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

1) Weight without thruster

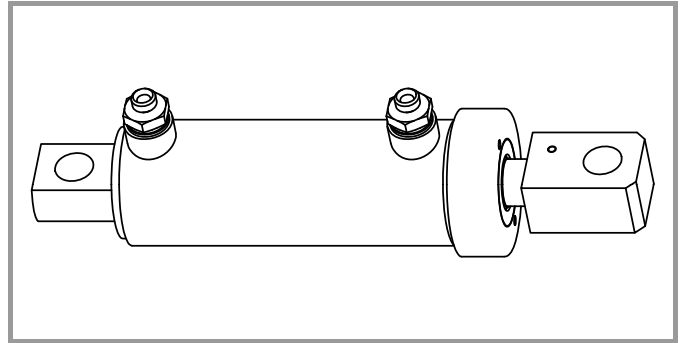


- | | |
|------------------------|-------------------------|
| 701 Base plate | 7522 Thrust piece |
| 702 Bolts | 7523 Thrust screw |
| 704 Set screw with nut | 754 Tooth gear wheel |
| 709 Brake lever „A“ | 755 Spacer bushing |
| 710 Brake lever „B“ | 756 Protective cap |
| 711 Draw rod | 757 Adjusting nut |
| 712 Pivot | 761 Driver housing |
| 713 Split pin | 762 Ratchet |
| 716 Leaf spring | 7621 Screw spring |
| 717 Screws with nut | 763 Handle bolt |
| 720 Brake shoe | 764 Locknut |
| 722 Bearing bolt | 771 Bell lever, front |
| 723 Bearing bushing | 772 Bell lever, rear |
| 731 Brake lining | 775 Bolts |
| 751 Pull spindle | 777 Screw |
| 752 Cross beam | 781 Spring housing |
| 7521 Screw spring | 7812 Brake torque scale |

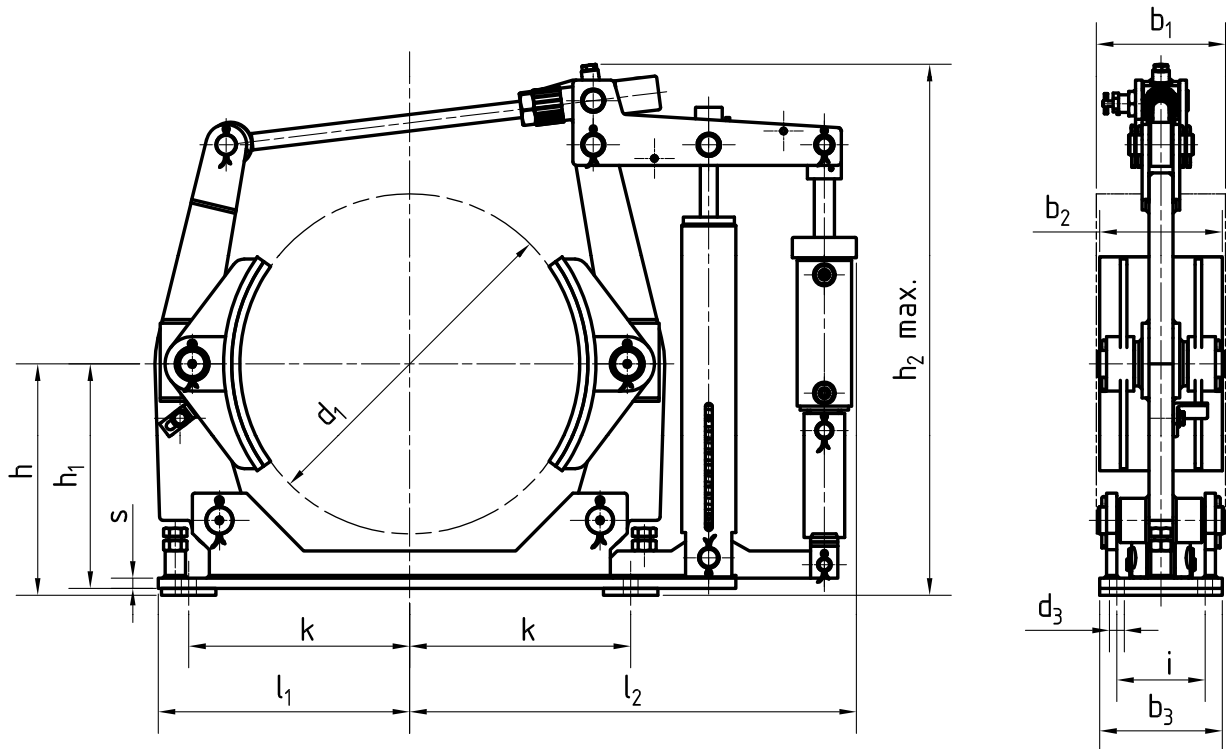




Brake shoe D500

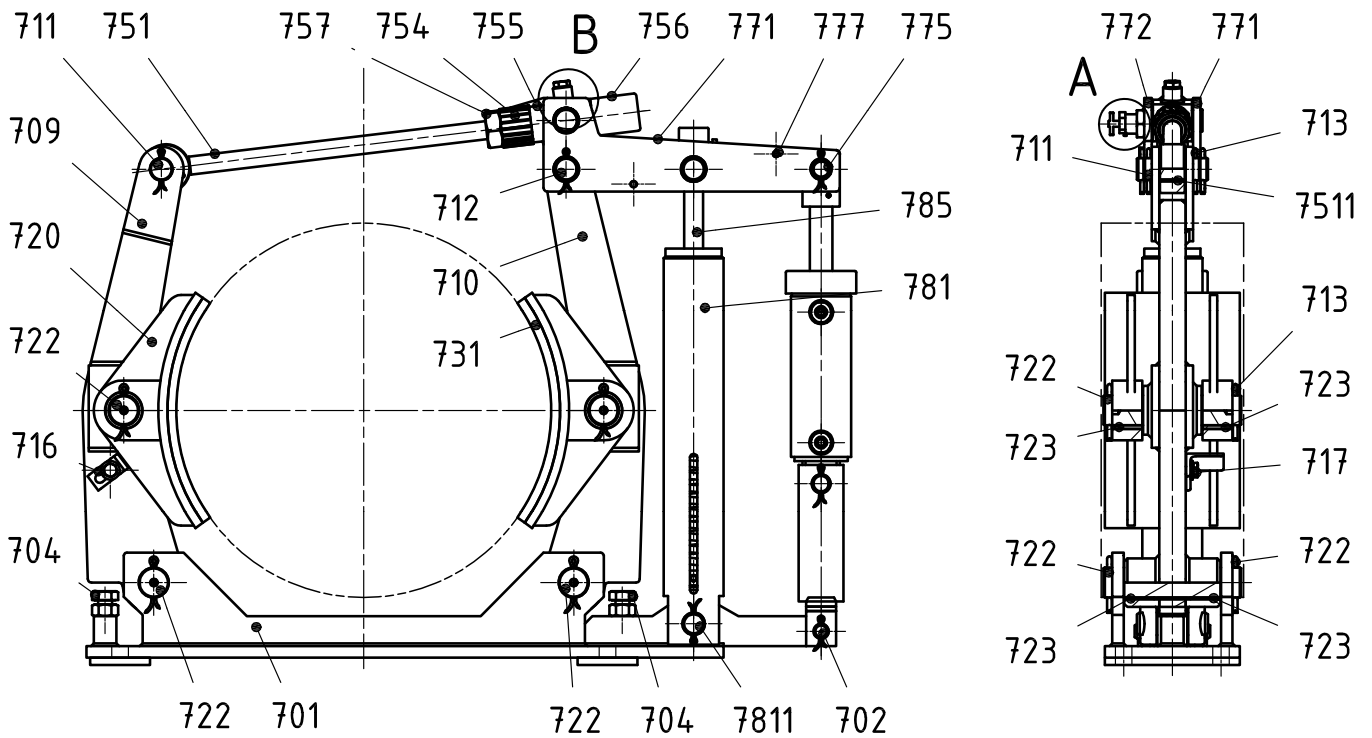


Cylinder 73TX



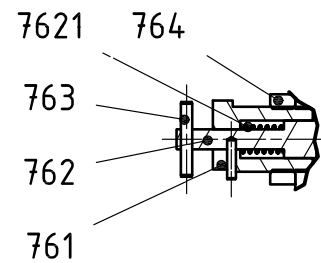
Dimensions

Type	Brake torque Nm by $\mu=0,4$	d_1 mm	b_1 mm	b_2 mm	b_3 mm	d_3 mm	h mm	h_1 mm	$h_2^{2)}$ mm	i mm	k mm	l_1 mm	l_2 mm	s mm	Weight kg	
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															855
19/710/74 TX	1760 - 7410	710	265	255	250	27	470	460	1120	190	450	510	860	20	225	
19/710/73TX/12	1470 - 5880															965
19/710/74TX/12	2230 - 8940															970

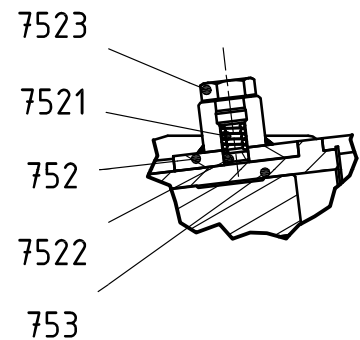


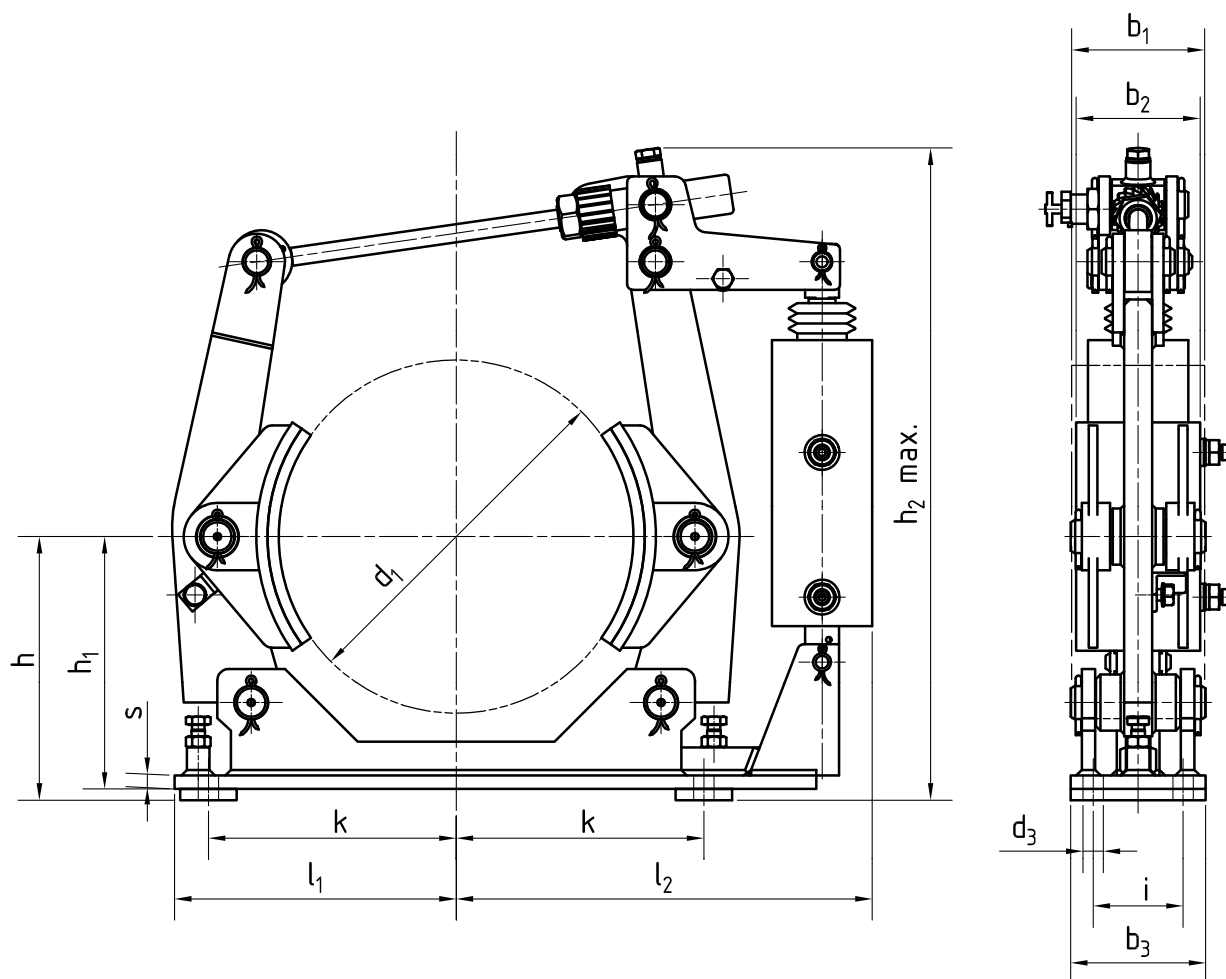
A

- | | |
|------------------------|-----------------------|
| 701 Base plate | 753 Spindle nut |
| 702 Bolts | 754 Tooth gear wheel |
| 704 Set screw with nut | 755 Spacer bushing |
| 709 Brake lever "A" | 756 Protective cap |
| 710 Brake lever "B" | 757 Adjusting nut |
| 711 Draw rod | 761 Driver housing |
| 712 Pivot | 762 Ratchet |
| 713 Split pin | 7621 Screw spring |
| 716 Leaf spring | 763 Handle bolt |
| 717 Screws with nut | 764 Locknut |
| 720 Brake shoe | 771 Bell lever, front |
| 722 Bearing bolt | 772 Bell lever, rear |
| 723 Bearing bushing | 775 Bolts |
| 731 Brake lining | 777 Screw |
| 751 Pull spindle | 781 Spring housing |
| 7511 Bearing bushing | 7811 Bolts |
| 752 Cross beam | 785 Adjusting spindle |
| 7521 Screw spring | |
| 7522 Thrust piece | |
| 7523 Thrust screw | |



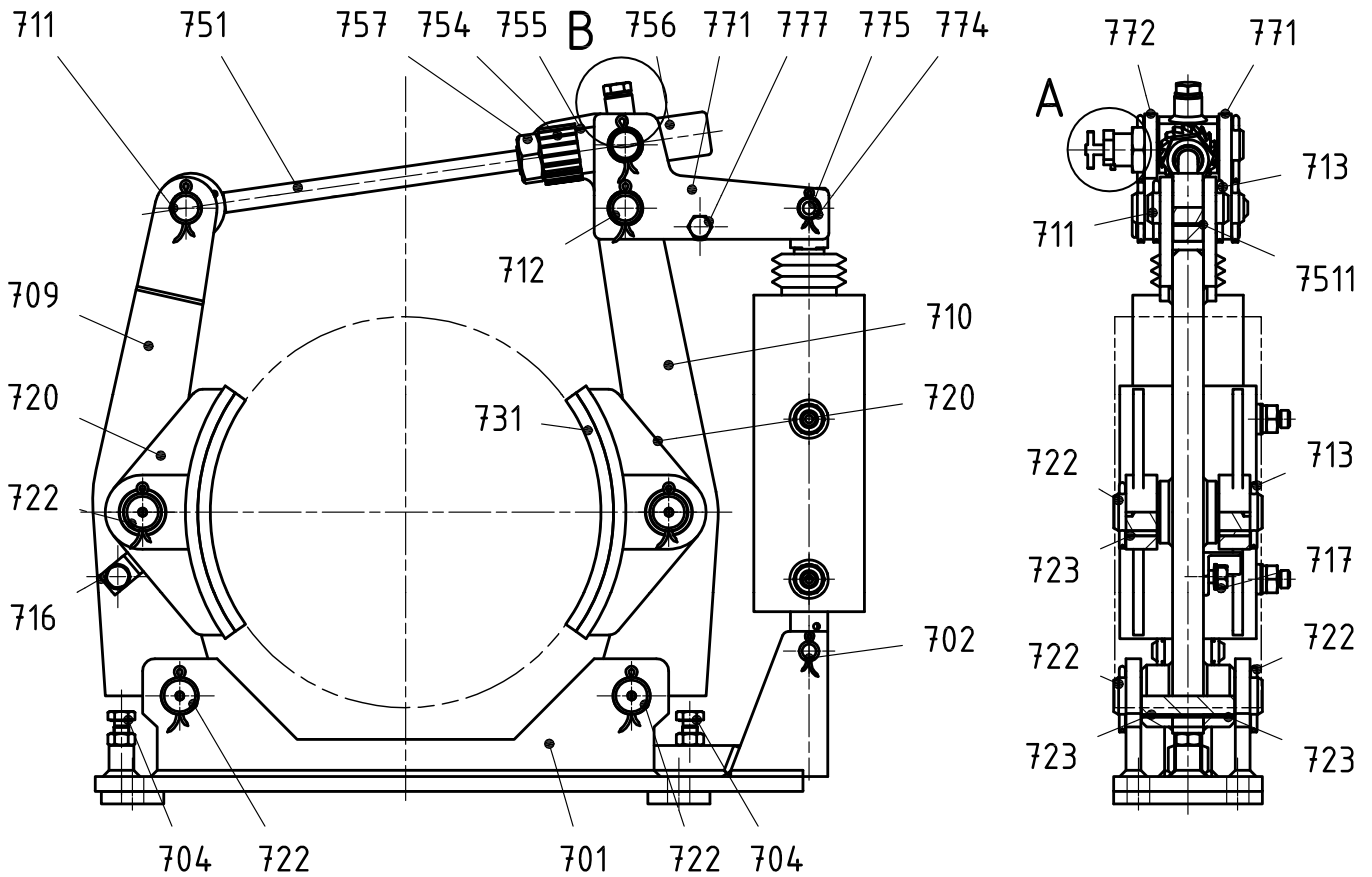
B



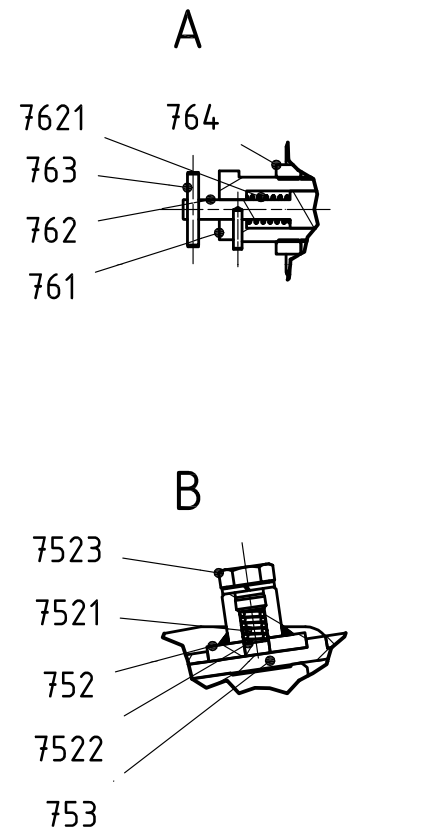


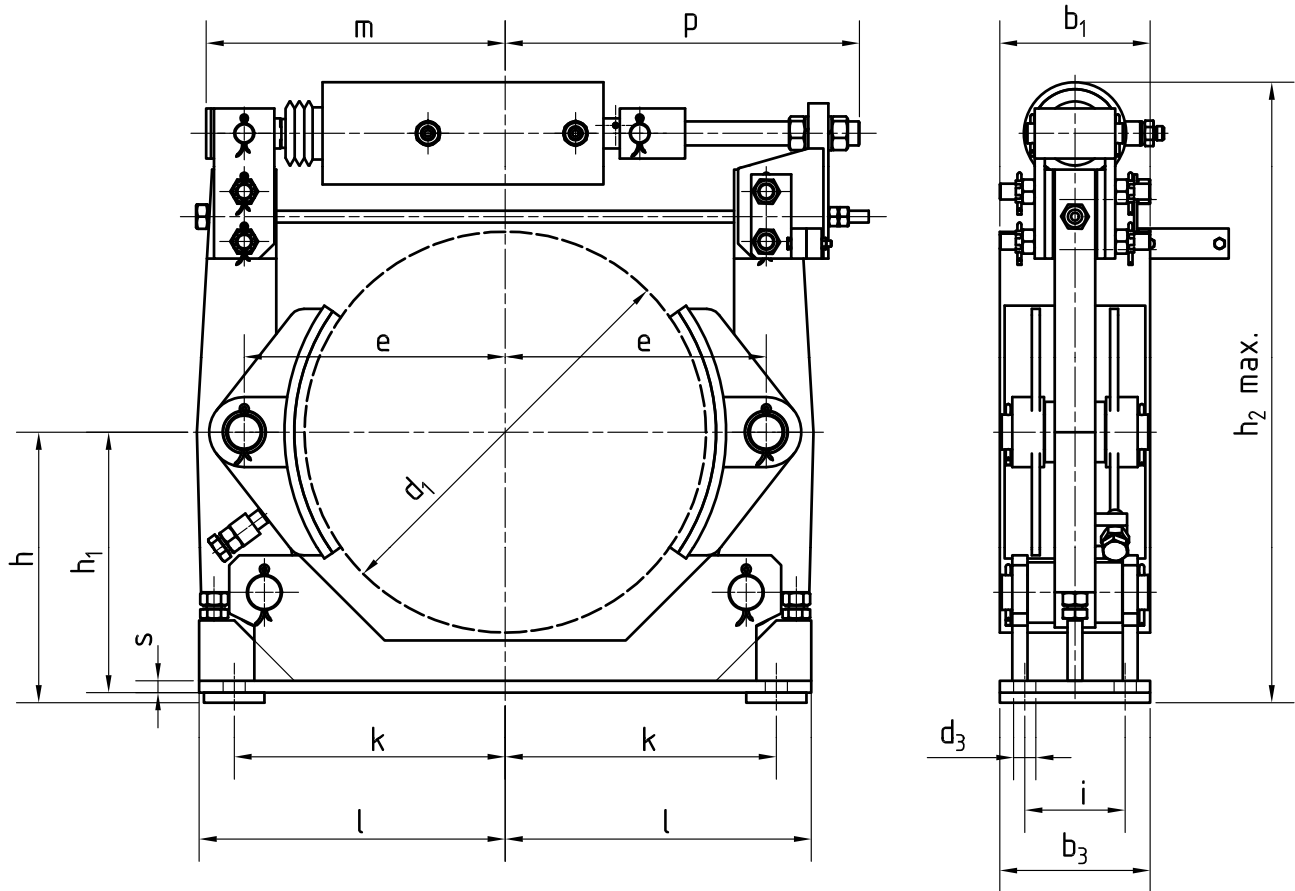
Dimensions

Type	Brake torque Nm by $\mu=0,4$	d_1 mm	b_1 mm	b_2 mm	b_3 mm	d_3 mm	h mm	h_1 mm	$h_2^{2)}$ mm	i mm	k mm	l_1 mm	l_2 mm	s mm	Weight kg
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	250	95	90	100	18	190	185	500	65	180	205	325	10	23
18/250/1	470														
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														
18/630/6	4820	630	236	225	230	27	420	410	980	170	400	460	650	20	190
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 Base plate | 7522 Thrust piece |
| 702 Bolts | 7523 Thrust screw |
| 704 Set screw with nut | 753 Spindle nut |
| 709 Brake lever "A" | 754 Tooth gear wheel |
| 710 Brake lever "B" | 755 Spacer bushing |
| 711 Draw rod | 756 Protective cap |
| 712 Pivot | 757 Adjusting nut |
| 713 Split pin | 761 Driver housing |
| 716 Leaf spring | 762 Ratchet |
| 717 Screw with nut | 7621 Screw spring |
| 720 Brake shoe | 763 Handle bolt |
| 722 Bearing bolt | 764 Locknut |
| 723 Bearing bushing | 771 Bell lever, front |
| 731 Brake lining | 772 Bell lever, rear |
| 751 Pull spindle | 775 Bolts |
| 7511 Bearing bushing | 777 Screws |
| 752 Cross beam | |
| 7521 Screw spring | |



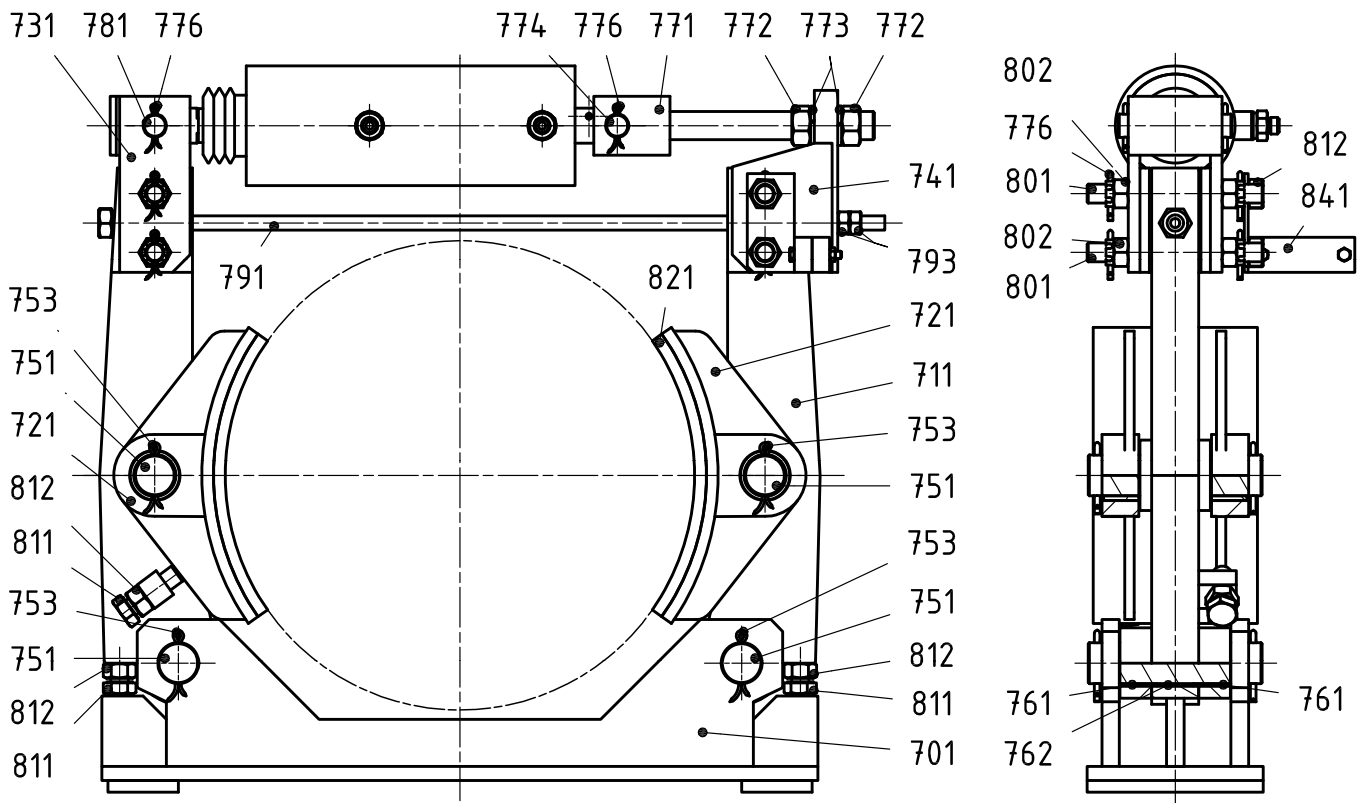


Dimensions

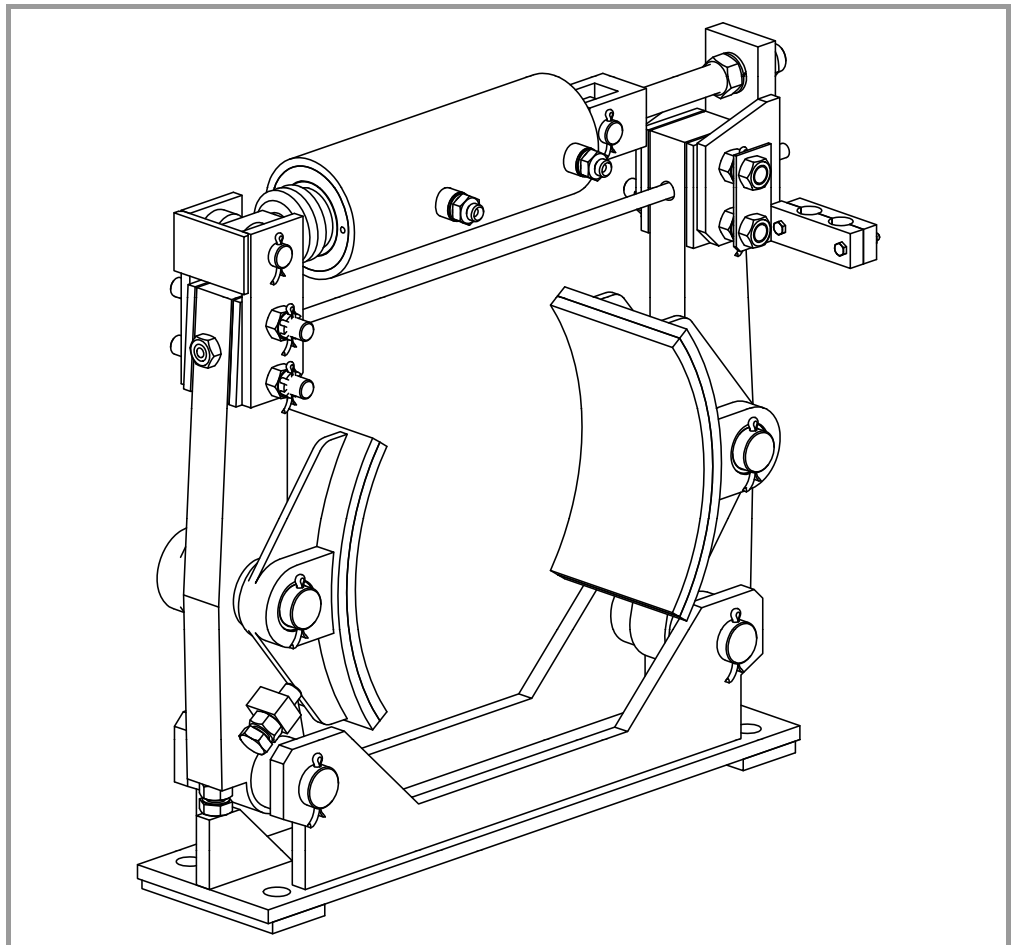
Type	d ₁ mm	d ₁ mm	b ₂ mm	b ₃ mm	d ₃ mm	e mm	h mm	h ₁ mm	h ₂ mm	i mm	k mm	l mm	m mm	s mm	Weight kg
11/200	200	75	70	80	14	140	160	155	365	55	145	165	170	8	15,5
12/250	250	95	90	100	18	170	190	185	435	65	180	205	210	10	21,5
13/315	315	118	110	120	18	212	230	225	550	80	220	250	260	12	45
14/400	400	150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

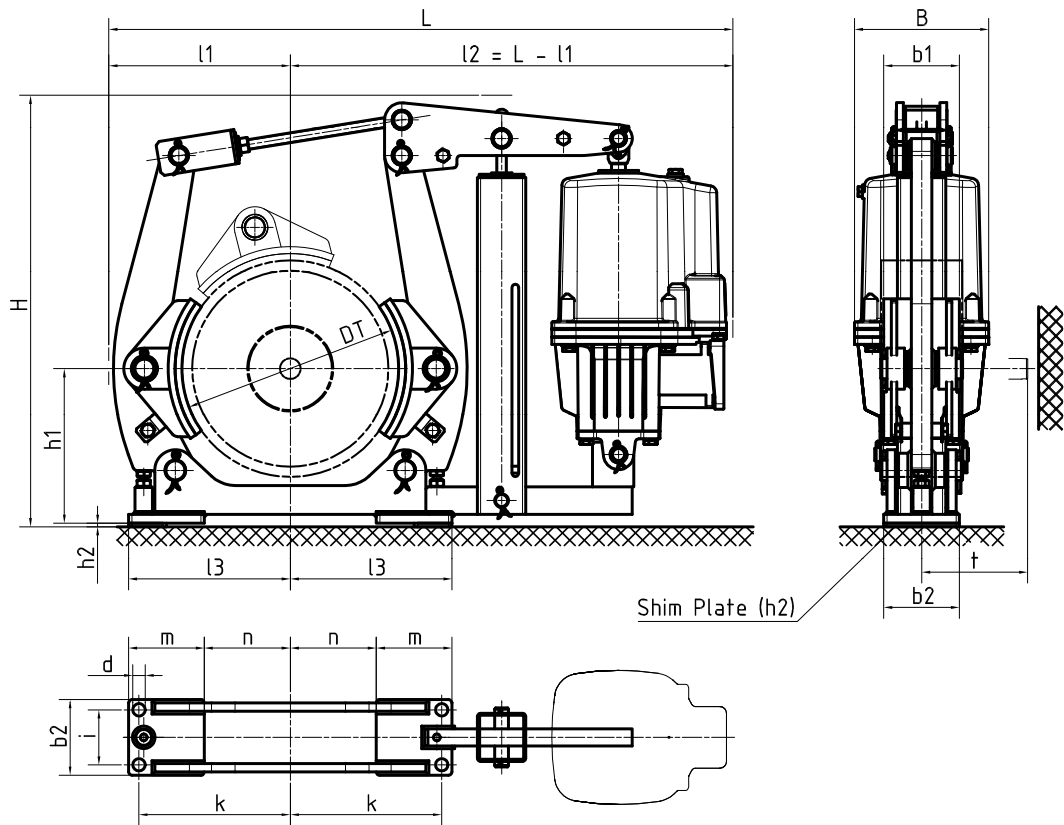
Brake torques „Mn“ and dimension „p“ with integrated Pressure Oil Cylinder, miscellaneous sizes

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	Gr.: 0	215	120	210	145										
	Gr.: 1	290	180	270	190	260	250								
	Gr.: 2			320	265	280	340	315	410						
	Gr.: 3					355	480	315	580						
	Gr.: 4					415	690	365	820	385	1050				
	Gr.: 5							400	1160	385	1500	470	1950		
	Gr.: 6									460	2200	470	2800	520	3100
	Gr.: 7									565	3000	490	3800	520	4250
	Gr.: 8											615	5200	565	5800



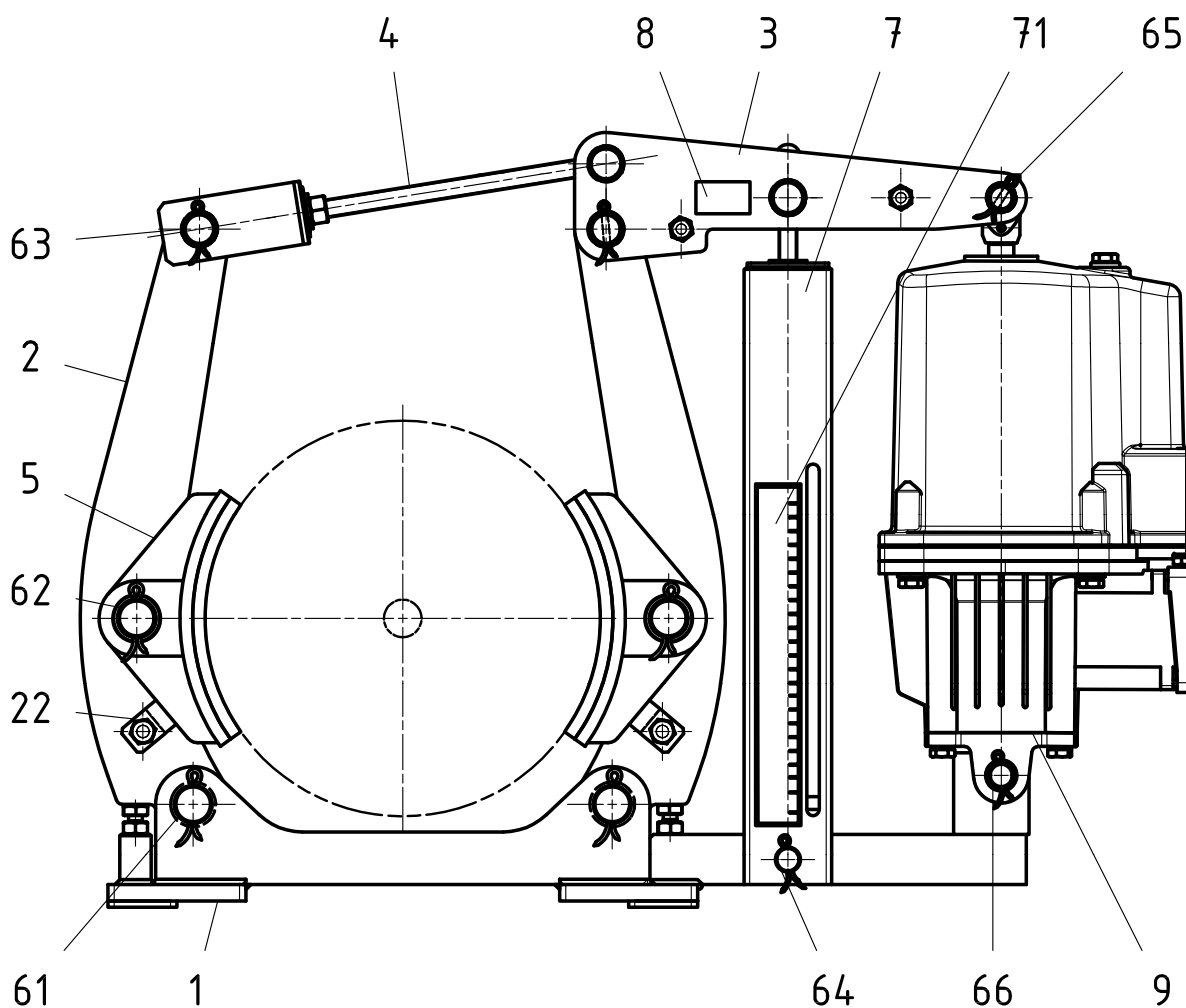
- 701 Base plate
- 711 Brake lever
- 721 Brake shoe
- 731 Lever head "B"
- 741 Lever head "A"
- 751 Bearing Bolt
- 753 Split pin
- 761 Bearing bushing
- 762 Spacer bushing
- 771 Fork unit
- 772 Nut
- 773 Spring washer
- 774 Cylinder bolt "A"
- 776 Split pin
- 781 Cylinder bolt "B"
- 791 Drow rod
- 793 Nut
- 801 Staybolt
- 802 Castellated nut
- 811 Adjusting screw
- 812 Nut
- 821 Brake lining
- 841 Hose clamp



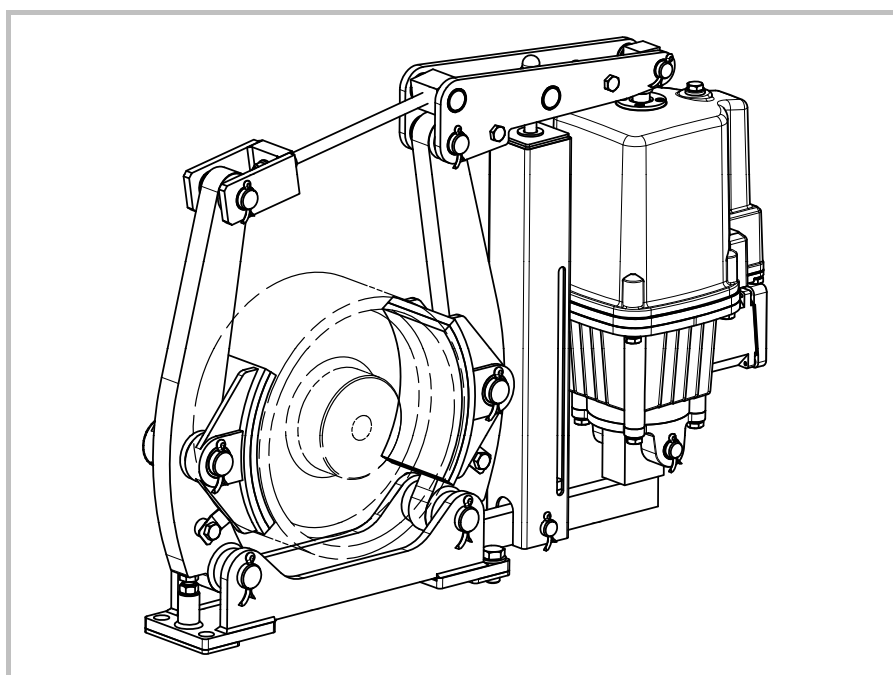


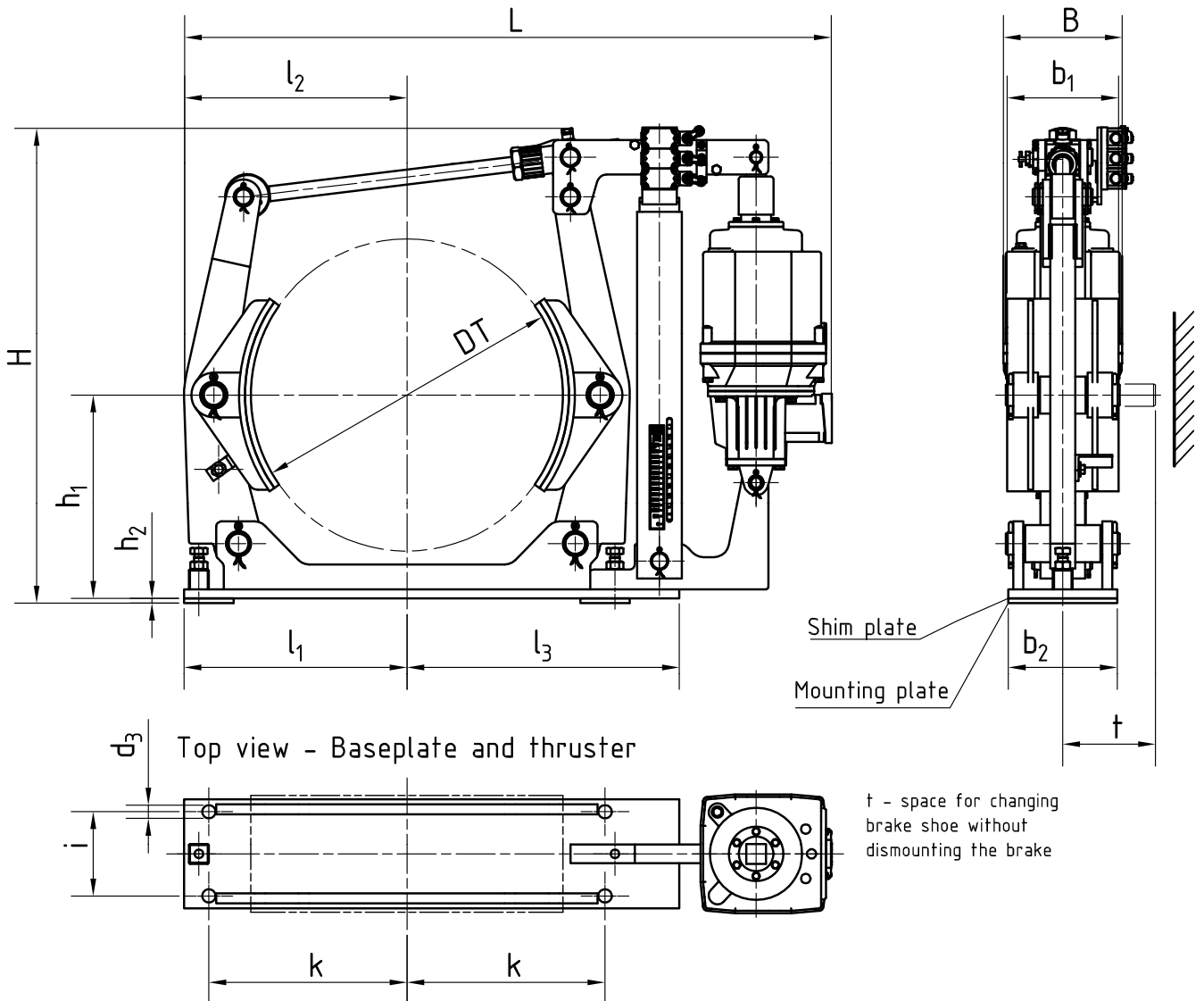
DT mm	Thruster acc to DIN 15 430	Brake torque Nm by $\mu = 0,4$	B mm	b1 mm	b2 mm	d mm	H mm	h1 mm	h2 mm	L mm	l1 mm	l3 mm	i mm	k mm	m mm	n mm	t mm	m ¹⁾ kg
200	Ed 230 - 50	50 - 300	160	75	80	14	480	155	5	670	185	165	55	145	80	85	105	26
	Ed 300 - 50	50 - 420								670								
250	Ed 230 - 50	50 - 300	160	95	100	18	550	185	5	740	215	195	65	180	100	95	126	35
	Ed 300 - 50	50 - 425	740															
315	Ed 500 - 60	80 - 375	160	118	110	18	640	225	5	875	265	235	80	220	110	125	151	54
	Ed 300 - 50	80 - 525								875								
400	Ed 500 - 60	120 - 940	195	150	140	22	720	270	10	910	330	300	100	270	140	160	190	70
	Ed 800 - 60	120 - 1610	1000															
500	Ed 230 - 50	120 - 375	160	190	180	22	880	330	10	1005	400	360	130	325	180	180	235	130
	Ed 300 - 50	120 - 525								1240								
630	Ed 500 - 60	200 - 940	195	236	220	27	1060	410	10	1230	475	445	170	400	220	225	285	195
	Ed 800 - 60	200 - 1610								1380								
710	Ed 1250 - 60	250 - 1250	240	265	240	27	1160	460	10	1535	535	500	190	450	240	260	320	240
	Ed 2000 - 60	250 - 2080								1240								
710	Ed 2000 - 60	250 - 3200	240	265	240	27	1160	460	10	1535	535	500	190	450	240	260	320	240
	Ed 3000 - 60	250 - 5000								1230								
710	Ed 3000 - 60	350 - 7300	240	265	240	27	1160	460	10	1535	535	500	190	450	240	260	320	240
	Ed 3000 - 120	1000 - 10000								1230								

1) without Thruster



- 1 Base plate
- 2 Brake lever
- 3 Angle lever complete
- 4 Draw rod complete
- 5 Brake shoe with lining
- 6 2 Bolts Pos. 61, 62, 63
- 1 Bolt Pos. 64, 65, 66
- 7 Spring complete
- 8 Type plate
- 9 Thruster
- 22 Brake shoe clampspring with mounting parts
- 71 Brake torque scale





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:
