by SIBRE



Who performs a special, extraordinary service, **is a hero.**

Who has special abilities like extraordinary strength, speed or endurance,

is a hero.





The world of industrial brakes

SIBRE

The SIBRE Siegerland Bremsen GmbH is a worldwide operating, medium-sized company of traditions with meanwhile over 60 years of company history. From the very first the company engages in the development and production of brake systems for the industry. Right from the start value was set on technical innovation, the most modern manufacturing technology and high customer use. Production procedures are continuously supervised by a quality management system. The aim of the product development is an optimum combination of a top-quality product, the easiest use and market-driven price both for plant engineers and plant operators.

We have upgraded the well proven design of our USB thruster disc brakes, the new generation is even more reliable and efficient and comes with several new design features.



Heroes. by SIBRE



Standardized functional principle, available in 5 different sizes Designed for all applications in a crane (gantry, boom, slewing, hoist) Identical conditions in regards to installation, adjustment and maintenance ŚIBRE

Improved brake linings More stable friction coefficient and brake torque Extended lifetime



Parallel opening of brake shoes Simplified alignment of the brake system Minimized risk of sliding between disc and linings



Optimized spring guiding unit Reduced noise emission Extended lifetime of brake spring

Upgraded manual release system Increased operational safety for manual load lowering



Enhanced corrosion protection By design features and improved coating

Additional options for status monitoring Load cells for measuring the brake torque PT100 temperature sensors for the brake linings Linear position sensor for monitoring of thruster stroke Linear position sensor for torque adjustment



five dimensions



USB 5 05

Braking torque: 100 - 690 Nm

Centre height: 160 mm

Weight: 46 kg

USB 5 I

Braking torque: 550 - 5.500 Nm

Centre height: 230 mm

Weight: 85 kg

USB 5 II

Braking torque: 1.300 - 9.800 Nm

Centre height: 280 mm

Weight: 175 kg

one concept



USB 5 III

Braking torque: 3.500 - 26.000 Nm

Centre height: <u>370 mm</u>

Weight: 250 kg

USB 5 V

Braking torque: 6.000 - 29.000 Nm SIBRE

Centre height: <u>280 mm</u>

Weight: 285 kg



- Brake linings of sintered material with standard brake disc material S355J2G3
- The specified braking torques are based on an average friction coefficient µm = 0,4 with grinded and optimum conditioned brake linings up to a sliding speed of 60 m/s. Deviating parameters can reduce the friction-coefficient
- Please contact us when using thrusters with lifting- and/ or lowering valves
- Weight without thruster: 285 kg
- Thruster position: For 500/8 as shown, all others turned by 180°
- Available options:
 - Special executions for low and high ambient temperature
 - Manual release
 - Inductive sensors for indication "brake open", "brake closed" and/ or "pad wear"
 - Temperature sensor for brake linings
 - Load cell for monitoring of clamping force



1290



R1 + 58.5 mm L:

Thruster type				201/12		301/12		400/8		500/8			
	Dimensi	ons in mr	n		Braking torque M in Nm								
D2	D3	R1	С	Mmin	Mmax	Mmin	Mmax	Mmin	Mmax	Mmin	Mmax		
630	310	185	620	6000	9000	8000	12500	8000	15500	7000	16500		
710	390	225	660	7500	10500	9000	14500	9000	18000	8500	19500		
800	480	270	705	8500	12000	10500	16500	10500	21000	10000	22500		
900	580	320	755	9500	13500	12000	19000	12000	24000	11000	25500		
1000	680	370	805	11000	15500	14000	21500	14000	27000	12500	29000		

360 450

Thrus	ter type	(2000/120 3000/120						6300/120			
1	Dimensi	ons in mr	n		Braking torque M in Nm							
D2	D3	R1	С	Mmin	Mmax	Mmin	Mmax	Mmin	Mmax			
630	310	185	620	5500	8500	8000	12500	8000	15500			
710	390	225	660	6500	10000	9000	14500	9000	18000			
800	480	270	705	7500	11500	10500	16500	10500	21000			
900	580	320	755	8500	13000	12000	19000	12000	24000			
1000	680	370	805	9500	15000	14000	21500	13500	27500			



- Brake linings of sintered material with standard brake disc material S355J2G3
- The specified braking torques are based on an average friction coefficient µm = 0,4 with grinded and optimum conditioned brake linings up to a sliding speed of 60 m/s. Deviating parameters can reduce the friction-coefficient
- Please contact us when using thrusters with lifting- and/ or lowering valves
- Weight without thruster: 250 kg
- Available options:
 - Special executions for low and high ambient temperature
 - Manual release
 - Inductive sensors for indication "brake open", "brake closed" and/ or "pad wear"
 - Temperature sensor for brake linings
 - Load cell for monitoring of clamping force







D2: outer disc diameter D3: max. coupling or hub-Ø B: disc width = 30 mm L: R1 + 78.5 mm



Thrus	ter type			121	/6	<u> </u>					400/6		
	Dimensi	ons in mi	m		Braking torque M in Nm								
D2	D3	R1	С	Mmin	Mmax	Mmin	Mmax	Mmin	Mmax	Mmin	Mmax		
560	298	140	564	3500	4500	4000	7000	6000	10500	6500	13000		
630	380	181	605	4000	5500	5000	8000	7000	12000	7500	15500		
710	455	221	645	4500	6000	5500	9500	8500	14000	9000	17500		
800	535	266	690	5000	7000	6500	11000	9500	16000	10000	20000		
900	630	316	740	6000	8000	7500	12500	11000	18500	11500	23000		
1000	725	366	790	6500	9000	8500	14000	12500	20500	13000	26000		

Thrus	ter type	•		1250/60		2000/60		3000/60				
	Dimensi	ons in mr	n		Braking torque M in Nm							
D2	D3	R1	С	Mmin	Mmax	Mmin	Mmax	Mmin	Mmax			
560	265	140	564	2500	4000	4000	7000	6000	10000			
630	345	181	605	3000	4500	4500	8000	7000	11500			
710	425	221	645	3500	5500	5000	9000	8000	13000			
800	515	266	690	4000	6000	6000	10500	9000	15000			
900	615	316	740	5000	7000	7000	12000	10500	17500			
1000	715	366	790	5500	8000	7500	13500	11500	19500			

disc brake USB 5 ||



- Brake linings of sintered material with standard brake disc material S355J2G3
- The specified braking torques are based on an average friction coefficient µm = 0,4 with grinded and optimum conditioned brake linings up to a sliding speed of 60 m/s. Deviating parameters can reduce the friction-coefficient
- Please contact us when using thrusters with lifting- and/ or lowering valves
- Weight without thruster: 175 kg
- Available options:
 - Special executions for low and high ambient temperature
 - Manual release
 - Inductive sensors for indication "brake open", "brake closed" and/ or "pad wear"
 - Temperature sensor for brake linings
 - Load cell for monitoring of clamping force









D2: outer disc diameter D3: max. coupling or hub-Ø B: disc width = 30 mm L: R1 + 78,5 mm

Thrus	ter type	;		50/7		80/7		125/7				
	Dimensi	ons in mr	n		Braking torque M in Nm							
D2	D3	R1	С	Mmin	Mmax	Mmin	Mmax	Mmin	Mmax			
450	190	95	465	1300	2000	1500	3200	1700	4900			
500	240	120	490	1500	2300	1700	3600	1900	5600			
560	300	150	520	1800	2700	2000	4200	2200	6400			
630	370	185	555	2100	3100	2300	4800	2500	7400			
710	450	225	595	2400	3600	2600	5600	2900	8500			
800	530	270	640	2700	4100	3000	6400	3300	9800			

disc brake **USB 5** |



- Brake linings of sintered material with standard brake disc material S355J2G3
- The specified braking torques are based on an average friction coefficient µm = 0,4 with grinded and optimum conditioned brake linings up to a sliding speed of 60 m/s. Deviating parameters can reduce the friction-coefficient
- Please contact us when using thrusters with lifting- and/ or lowering valves
- Weight without thruster: 85 kg
- Available options:
 - Special executions for low and high ambient temperature
 - Manual release
 - Inductive sensors for indication "brake open", "brake closed" and/ or "pad wear"
 - Temperature sensor for brake linings
 - Load cell for monitoring of clamping force







- D2: outer disc diameter D3: max. coupling or hub-Ø B: disc width = 30 mm
- L: R1 + 70 mm



Thrus	ster type	5		30	0/5	80	80/6					
	Dimensi	ions in m	m		Braking torque M in Nm							
D2	D3	R1	С	Mmin	Mmax	Mmin	Mmax	Mmin	Mmax			
355	180	75.5	425.5	550	850	950	1700	900	2200			
400	230	102	452	650	950	1100	1900	1000	2600			
450	280	127	477	750	1100	1200	2200	1200	3000			
500	330	152	502	850	1200	1400	2500	1300	3400			
560	390	182	532	1000	1400	1600	2900	1500	3900			
630	450	217	567	1100	1600	1900	3300	1700	4400			
710	530	257	607	1300	1900	2100	3800	2000	5100			

Thrus	ster type	:		300/50		500/60		800/60				
	Dimensi	ons in m	m		Braking torque M in Nm							
D2	D3	R1	С	Mmin	Mmax	Mmin	Mmax	Mmin	Mmax			
355	180	75.5	425.5	550	850	650	1400	900	2200			
400	230	102	452	650	950	750	1600	1000	2600			
450	280	127	477	750	1100	900	1900	1200	3000			
500	330	152	502	850	1200	1000	2100	1300	3400			
560	390	182	532	1000	1400	1100	2400	1500	3900			
630	450	217	567	1100	1600	1300	2800	1700	4400			
710	530	257	607	1300	1900	1500	3200	2000	5100			

disc brake **USB 5** 05



- Brake linings of sintered material with standard brake disc material S355J2G3
- The specified braking torques are based on an average friction coefficient µm = 0,4 with grinded and optimum conditioned brake linings up to a sliding speed of 60 m/s. Deviating parameters can reduce the friction-coefficient
- Please contact us when using thrusters with lifting- and/ or lowering valves
- Weight without thruster: 46 kg
- Available options:
 - Special executions for low and high ambient temperature
 - Manual release
 - Inductive sensors for indication "brake open", "brake closed" and/ or "pad wear"
 - Temperature sensor for brake linings
 - Load cell for monitoring of clamping force









D2: outer disc diameter D3: max. coupling or hub-Ø B: disc width = 30 mm L: R1 + 39 mm

Thrus	ster type	<u>;</u>		23	/5	30/5			
				220	-50	300-50			
	Dimensi	ons in m	m	Bra	Braking torque M in Nm				
D2	D3	R1	С	Mmin	Mmax	Mmin	Mmax		
250	75	61	331	100	210	100	390		
280	105	76	346	130	240	130	450		
315	140	93	363	150	270	150	520		
355	180	113	383	180	310	180	600		
400	220	135	405	210	360	210	690		

The SIBRE world of industrial brakes

GERMANY - HEADQUARTER

SIBRE – Siegerland Bremsen GmbH Auf der Stücke 1-5 35708 Haiger Phone: +49 2773 9400-0 Email: info@sibre.de

USA

SIBRE Brakes USA P.O. Box 164 Cedarville NJ 08331 207 Bogden Blvd. Suite D Millville NJ 08332

Phone: +1 856 367 73 54 Email: megan.watson@sibreusa.com

SPAIN

SIBRE Brakes Spain S.L. Pol. Ind. Trevenez C/Actriz Amelia de la Torre 3 E-29004 Malaga Phone: +34 952 203912 Email: jtoscano@sibre.es

ITALY

SIBRE Italia S.r.l. Via Zanardelli 102 I-25089 – Villanuova sul Clisi, BS Phone: +39 347 8847455 Email: sales@sibre.it

SWEDEN

SIBRE Brakes Scandinavia AB Strandvägen 10 475 40 Hönö Sweden Phone: +46 31 96 21 90 Email: goran@sibre.se



SERBIA

SIBRE Fluidotehnic d.o.o. Rudijinci 175 / A 36210 Vrnjacka Banja Phone: +381 36 631710 Email: office@fluidotehnic.com

INDIA

SIBRE Brakes (India) Pvt Ltd "Sukh Sagar" 7th Floor, 7-A 2/5, Sarat Bose Road Kolkata 700 020 India

Phone: +91 33 24543280 Email: info@sibre.in

MALAYSIA

SIBRE Brakes (S.E.A.) Pte. Ltd.

No.5, Soon Lee Street, #02-38, Pioneer Point Singapore 627607 Singapore

Phone: +65 6710 4461 Email: info@sibre.com.sg

CHINA

SIBRE Brakes Tianjin Co. Ltd. No. 8, Haitong Street, TEDA, CN-Tianjin 300457, P.R. China Phone: +86 22 59813100 Email: info@sibre.cn

Heroes by SIBRE





sure to be safe

SIBRE Siegerland Bremsen GmbH Auf der Stücke 1 - 5 D-35708 Haiger - Rodenbach Tel. +49 2773 9400-0

info@sibre.de | www.sibre.de