



WELCOME TO DELLNER BUBENZER



DELLNER BUBENZER is a global leader in the design and manufacture of braking systems. Our unrivaled braking equipment offers customized stop-action solutions for a wide variety of industries from sea to sky, and everything in between.

For decades DELLNER BUBENZER products have been recognized worldwide as innovative braking solutions that are precision engineered to meet the highest quality standards.

GLOBAL STRENGTH, LOCAL COMMITMENT

Our global team of experts instill trust in our customers, develop and innovate with the latest technology, and provide strength in our product and personalized service.

Anchored by integrity and committed to sustaining our industry-leading product offering, our diverse community of extremely talented people around the world are committed to serving local customers.

The performance of our products and the satisfaction of our customers is our priority. DELLNER BUBENZER customers trust our commitment to excellence and recognize the value of our investment in our **Worldwide Service Network**.



PREVENTATIVE SERVICE

INSPECTION &
MAINTENANCE

REPAIRS

TRAINING



REACTIVE SERVICE

TECHNICIANS
ON CALL

24/7 TECHNICAL
SUPPORT



LIFE CYCLE MANAGEMENT

CUSTOMIZED
SERVICE CONTRACTS

RETROFITTING

ORIGINAL
SPARE PARTS

THE HIGHEST STANDARDS FOR MAXIMUM PERFORMANCE

DELLNER BUBENZER's innovative braking solutions and products are meticulously tested at our state-of-the-art research and development center. Our rigorous testing process proves and validates our research while ensuring maximum effectiveness, efficiency, and our shared client commitment to safety.

DELLNER BUBENZER's product standards are beyond meeting the Association for Iron & Steel Technology (AIST) criteria and the rigid requirements of Deutsches Institut für Normung e.V. (DIN). With a wide range of high capacity and high performance disc and drum brakes designed to operate in severe duty applications, our research, development, and testing center continuously validates our product performance and integrity.

Our commitment to research, development, and testing is the trustworthy foundation of DELLNER BUBENZER.



ENGINEERING

- ▶ DELLNER BUBENZER's trusted team of expert engineers rely on decades of experience to deliver superior products and braking systems for a multitude of industry-specific applications.
- ▶ From full braking system design to the assessment and optimization of existing solutions, DELLNER BUBENZER's engineers offer a full suite of services including 3D conceptualization, technical documentation, customized testing, and development of prototypes.



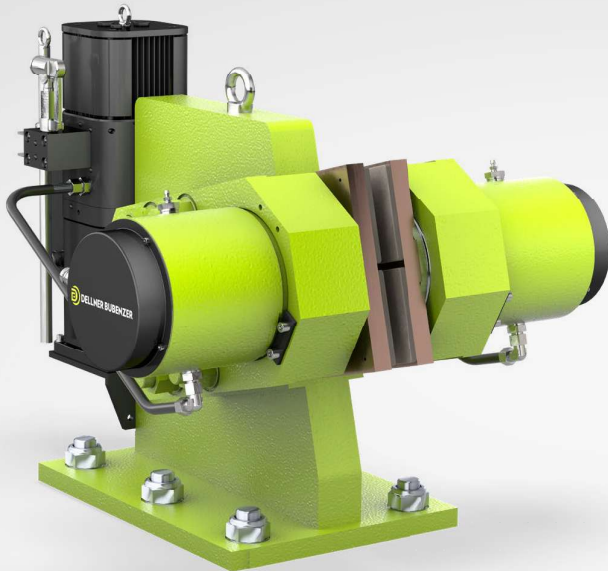
BRAKING SYSTEM DESIGN

- ▶ DELLNER BUBENZER's provides turn-key solutions for complete braking system design for static and dynamic applications.
- ▶ Upon review of input data, our engineers and product specialists evaluate system requirements, determine quantity, size and distribution of system components, perform 3D modeling for system design and/or adjustments, and deliver a complete global FEM model to ensure proper load management and system performance.



CLIMATE TESTING

- ▶ All products designed and manufactured by DELLNER BUBENZER endures in-depth climate and pressure performance testing to satisfy a stringent set of requirements for optimal performance, durability and safety.
- ▶ DELLNER BUBENZER conducts performance testing on one of the industry's largest test benches to ensure each product is prepared to meet the most rigorous demands within the world's harshest climates.



SF 10-40

The high capacity of the SF-series makes them particularly suitable as secondary emergency brakes on hoist gears and on downhill conveyors. Further applications are possible in material handling, requiring power and compact design in either direction of rotation, particularly in replacing band brakes.

TORQUE: Depending on contact pressure, coefficient of friction and brake disc diameter

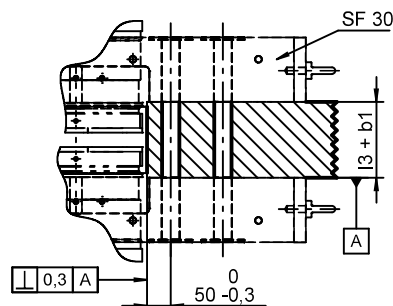
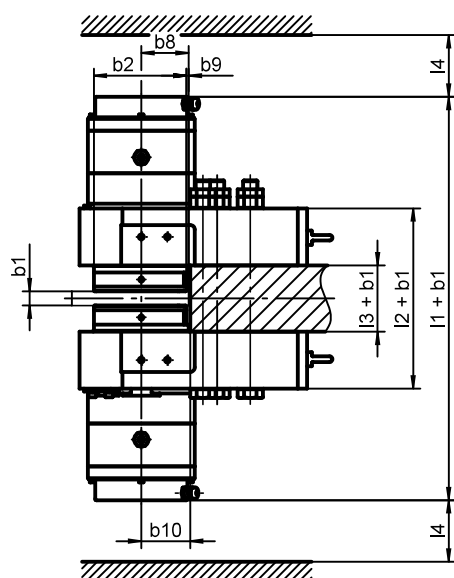
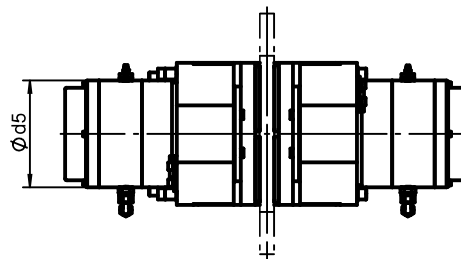
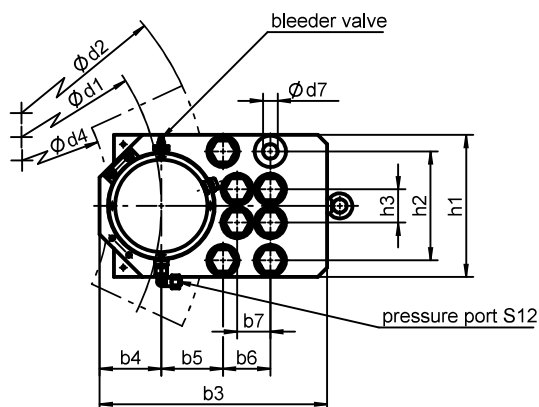
CONTACT FORCE: 400 kN

MAIN FEATURES:

- Two identical caliper halves, ready for operation, with spring packs set to nominal force and limit switch release control
- Up to 2 mm air gap between brake pad and disc
- Easy, manual pad wear compensation
- Sintered linings

OPTIONS:

- Proximity switch pad wear, brake release, brake set
- Complete piped supports for one or more calipers
- Hydraulic power units or BUEL G®
- Special seals for flameproof fluids
- Cleaning pads
- Brake discs
- Monitoring system CMB
- Piping set steel / stainless steel

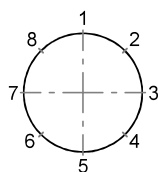


*) Average static friction factor of standard material combination

The friction coefficient is subject to fluctuations depending on operational-, material- and ambient-conditions! This must be considered during the selection!

brake torque M_{Br} in Nm = F_A (kN) x μ x d_1 (mm)

Please indicate required mounting position.



All dimensions in mm
Alterations reserved without notice

Type SF	10	15	24	30	40	
b ₂	165	165	195	280	300	
b ₃	410	410	480	640	720	
b ₄	110	110	130	155	175	
b ₅	115	115	130	200	220	
b ₆	85	85	100	110	125	
b ₇	60	60	70	110	125	
b ₈	85	85	100	140	160	
b ₉	5	5	5	5	10	
b ₁₀	90	90	105	150	170	
d ₅	175	175	225	280	310	
d ₇	25	25	31	38	50	
h ₁	270	270	300	400	480	
h ₂	220	220	230	300	375	
h ₃	90	90	70	100	125	
l ₁	657	687	821	955	997	
l ₂	300	300	350	402	506	
l ₃	100	100	110	130	110	
l _{min}	110	110	130	180	200	
Bolts (10.9)	M24	M24	M30	M36	M48	
Tighten. torque (μ=0,12) Nm	1017	1017	2033	3535	8550	
Contact force F _A	kN	100	150	240	300	400
Operating pressure	bar	140	180	180	210	210
Max. pressure	bar	200	200	200	240	240
Release stroke	mm	2	2	2	2	2
Oil volume	l	0,023	0,023	0,035	0,050	0,052
Pad surface	cm²	398	398	533	1050	1360
Theor. friction factor	μ*	0,40	0,40	0,40	0,40	0,40
Weight	kg	200	210	368	750	1180

Brake disc data

	SF 10	SF 15	SF 24	SF 30	SF 40
$d_1 =$	$d_2 - 170$	$d_2 - 170$	$d_2 - 200$	$d_2 - 290$	$d_2 - 320$
$d_4 =$	$d_2 - 420$	$d_2 - 420$	$d_2 - 490$	$d_2 - 620$	$d_2 - 700$

d_2 = Brake disc diameter in mm

d_1 = Friction diameter in mm

d_4 = Max. permissible drum or hub diameter in mm

b_1 = Disc thickness in mm (min. 30)



SF 50

The high capacity of the SF-series makes them particularly suitable as secondary emergency brakes on hoist gears and on downhill conveyor. Further applications are possible in material handling, requiring power and compact design in either direction of rotation, particularly in replacing band brakes.

TORQUE: Depending on contact pressure, coefficient of friction and brake disc diameter

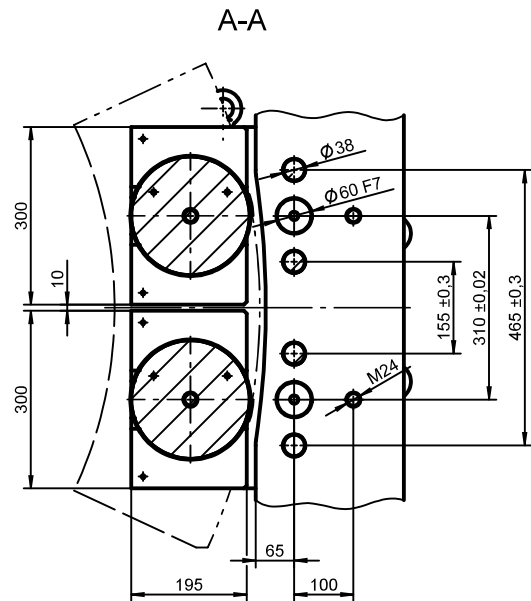
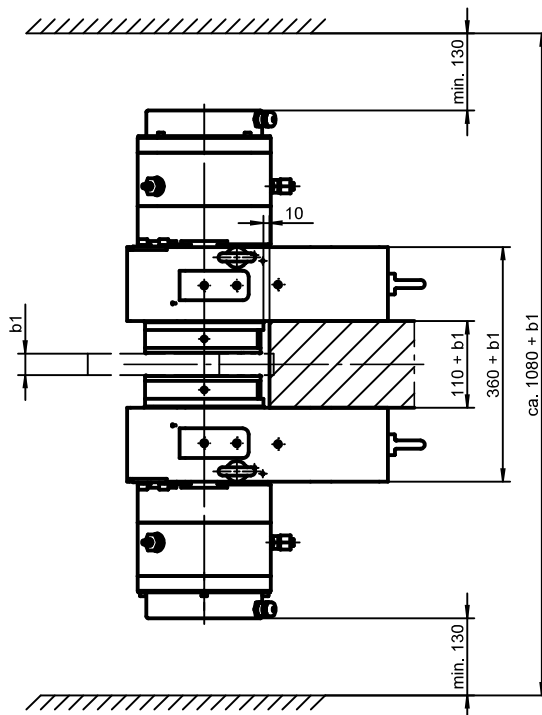
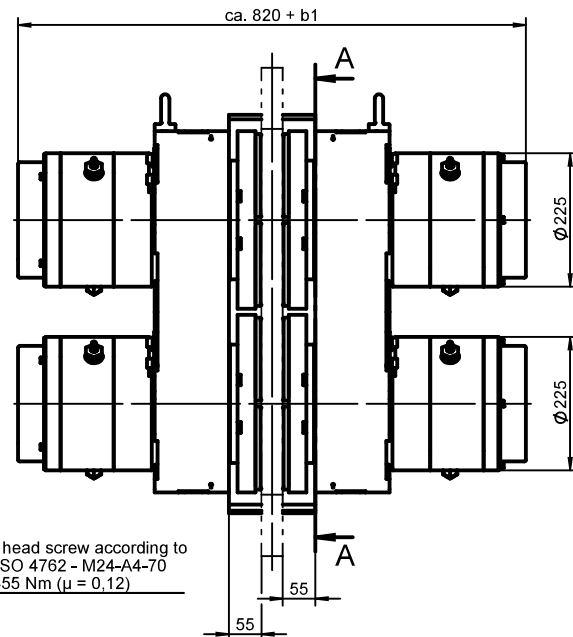
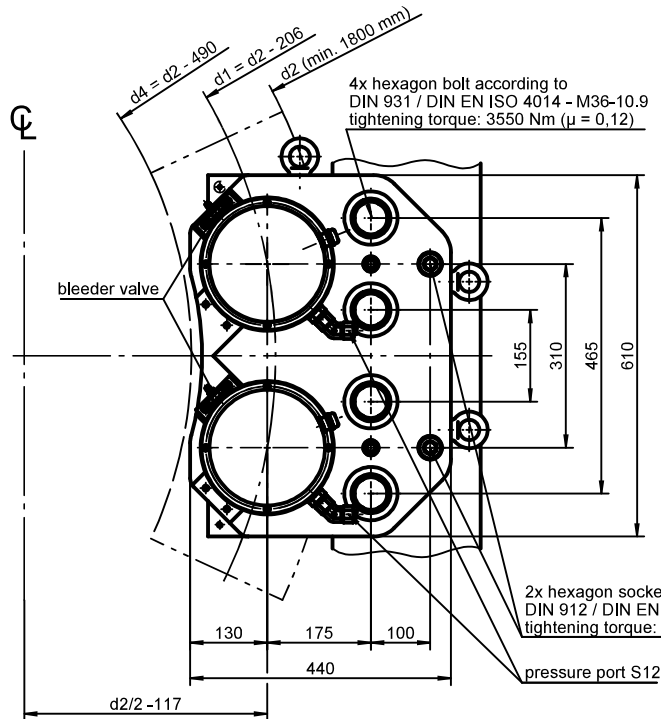
CONTACT FORCE: 510 kN

MAIN FEATURES:

- Two identical caliper halves, ready for operation, with spring packs set to nominal force and limit switch release control
- Up to 2 mm air gap between brake pad and disc
- Easy, manual pad wear compensation
- Sintered linings

OPTIONS:

- Proximity switch pad wear, brake release, brake set
- Complete piped supports for one or more calipers
- Hydraulic power units or BUEL G®
- Special seals for flameproof fluids
- Cleaning pads
- Brake discs
- Monitoring system CMB
- Piping set steel / stainless steel



$$\text{Brake torque } M_{Br} \text{ in Nm} = F_A \text{ (kN)} \times \mu \times d1 \text{ (mm)}$$

*) Theor. friction factor of standard material combination

All dimensions in mm
Alterations reserved without notice

Type SF 50		
Contact force F_A	kN	510
Operating pressure p	bar	200
Max. pressure p_{max}	bar	220
Release stroke	mm	2
Oil volume	l	0,07
Pad surface	cm ²	1040
Theor. friction factor	μ^*	0,40
Weight (without bracket)	kg	ca. 730

$d2$ = Brake disc diameter in mm
 $d1$ = Friction diameter in mm
 $d4$ = Max. permissible drum or hub diameter in mm
 $b1$ = Brake disc thickness in mm (min. 30)