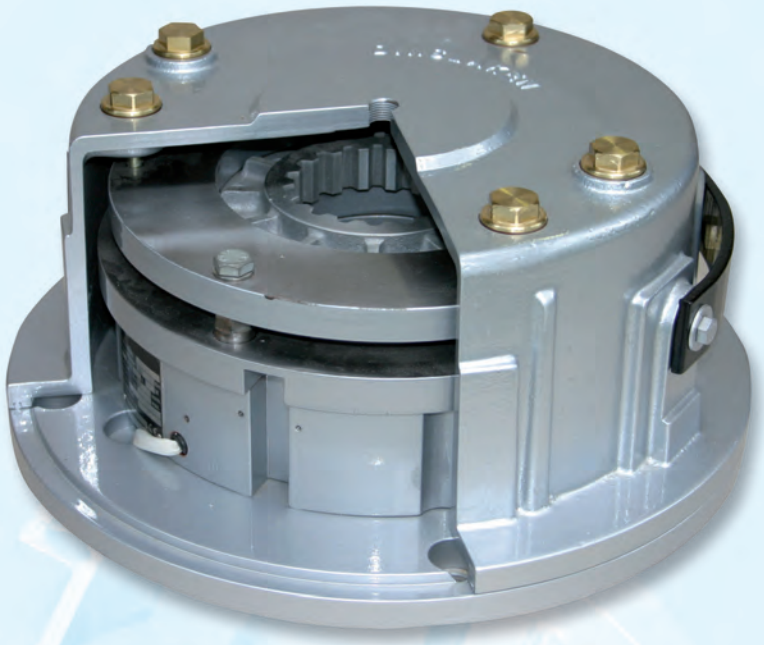


PINTSCH BUBENZER
is certified according to
DIN EN ISO 9001:2000

Reliable

High Performance

Robust

Easy Maintenance

Compact

Tried and Trusted

Description KFB

Main Features

- spring applied safety brake
- protection-class IP67 – seawater protected
- high wear reserve by multiple air gap adjustment
- small construction at high work capacity
- high availability caused by high durability
- functional without cover
- screws for manual lifting

Applications

- gantry-, trolley- and hoisting-application at harbour cranes
- dynamic and static use at general industrial applications
- general engineering
- steel mills
- wind energy systems
- coal mining

Options

- special brake torque
- handlever
- micro- or proximity switch:
  • function check brake on/off
  • maximum air gap (wear-monitoring)
- lateral junction box
- tacho preparation with all mounting parts
- cover bore
- shaft-sealings
- special voltage
- anticondensation heater
- lateral cable-outlet
- special flanges
- special electrical equipment:
- one-way-, bridge-, and switching- rectifier
- overvoltage protection element
- brake control unit = BCU 2001
- brake control and monitoring system = BCMS-4

Please Note

We supply a detailed operating manual with every order. Nevertheless, we would point out that brakes are only as safe as the servicing and maintenance performed while they are in operation. The guarantee for the correct functioning of our brakes is therefore only valid if the user adheres to the German DIN standard 15434 part 2 (drum and disc brakes, servicing and maintenance in operation), or to comparable standards in his own country.

PINTSCH BUBENZER Service

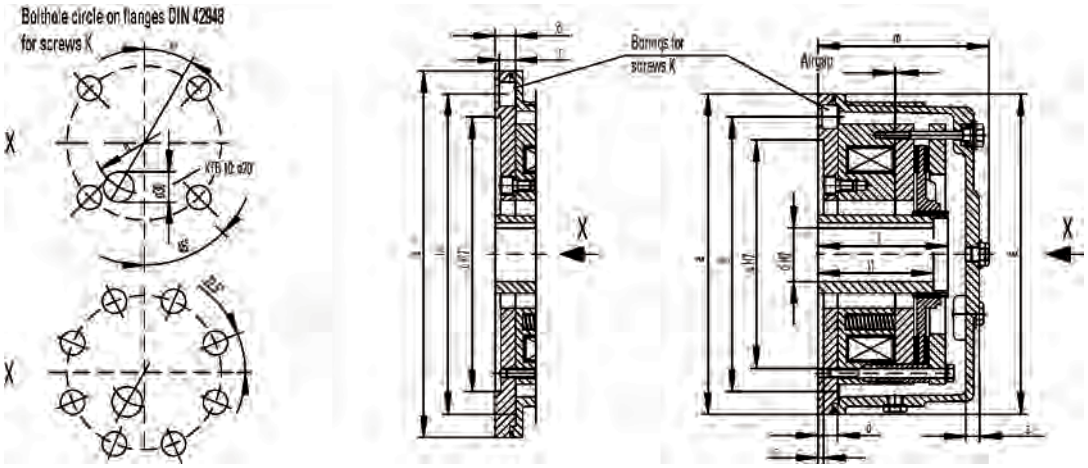
This includes the verification of the brake selection, if required. A detailed questionnaire is provided for this purpose. Installation and commissioning on site is possible by PINTSCH BUBENZER service engineers. Drawings as DWG/DXF files for your engineering department are available upon request.

Spring-Set Brake KFB

Dimensions and technical data

PINTSCH BUBENZER

Rev. 05-08



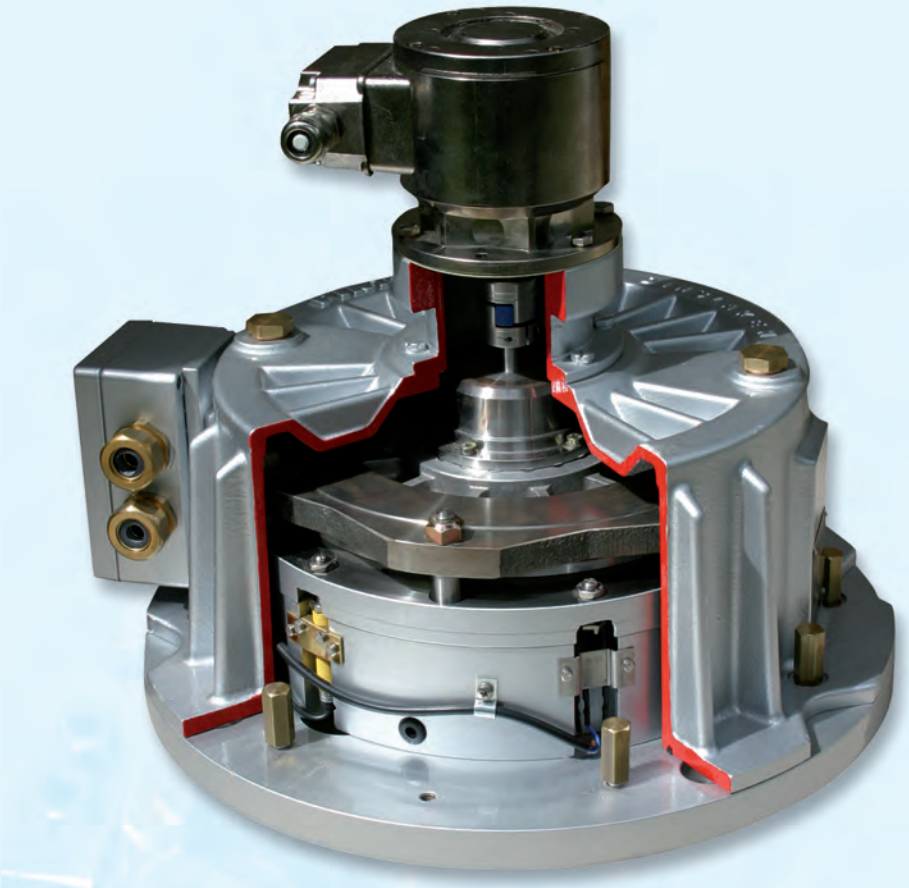
The larger dimension belongs to the larger assigned brake.

Alterations reserved without notice

Brake size				KFB 10	KFB 16	KFB 25	KFB 30	KFB 40	KFB 63	KFB 100	KFB 160
Brake torque M2 dynamic acc. to DIN VDE 0580			Nm	100	160	250	300	400	630	1000	1600
Mass moment of intertia			kgm²	0.0017	0.0037	0.0048	0.0055	0.0068	0.0175	0.036	0.050
Mass (weight)			kg	19	28	42	50	55	74	106	168
max. speed			min⁻¹	6000	6000	6000	6000	5500	4700	4000	3600
Coil b. 20° C	Nominal voltage		V DC	110	110	110	110	110	110	110	110
	Nominal power		W	93	128	158	133	196	220	307	344
	Nominal current		A	0.84	1.16	1.44	1.2	1.78	2.0	2.79	3.13
Airgap, OFF			norm. mm	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
			max. mm	1.0	1.0	1.2	0.8	1.2	1.3	1.6	1.8
Diameter mm	B-Side	d pilot bore		26	26	36	26	36	36	36	36
		d H7 preferrential bore		28	28	38	32	38	48	60	60
				32	32	42	38	42	55	65	65
				38	38	48	42	48	60	75	75
						55	45	55			
Lenghts mm	e			200/250	253/303	300/350	250/300	303/350	350/400	400/450	450/550
	f										
	h			106	144	194	144	194	214	264	314
	l			110	96	117	137	117	142	148	155
	l 1			110	96	117	137	117	142	142	142
	m			154	141	165	175	175	187	196	218
	s			15	15	15	15	15	15	15	17
∢	α °			30	30	30	67.5	30	30	30	30
Suitable standards flanges				A200	A250	A300	A250	A300	A350	A400	A450
				A250	A300	A350	A300	A350	A400	A450	A550

		Dimensions of standards flanges						
Size of standards flanges		A200	A250	A300	A350	A400	A450	A550
Diameter mm	a	200	250	300	350	400	450	550
	b	165	215	265	300	350	400	500
	c H7	130	180	230	250	300	350	450
Lenghts mm	o	18	18/20*	20/22*	22	22/24*	24/29*	24/29*
	q	5	5	5	6	6	6	6
	r	11	13	13	17.5	17.5	17.5	17.5
Screws	k	4xM10	4xM12	4xM12	4xM16	4xM16	8xM16	8xM16

C



PINTSCH BUBENZER
is certified according to
DIN EN ISO 9001:2000

Reliable

High Performance

Robust

Easy Maintenance

Compact

Tried and Trusted

Description SFB Series

Main Features

- spring applied safety brake
- protection-class IP67
- double wear reserve by single air gap adjustment
- high work capacity
- high wear resistance because of high abrasion resistance
- functional without cover
- screws for manual lifting

Applications

- gantry-, trolley- and hoisting-applications at harbour cranes
- electrical drives for ship- winches and deck machinery
- jack- up systems at offshore systems
- dynamic and static use at general industrial applications

Options

- special brake torque:
  lower brake torque = type SFB
  higher brake torque = type SFB-SH
- holding brake torques available on request
- micro- or proximity switches:
  • function brake on/off
  • maximum air gap (wear-monitoring)
- lateral junction box
- tacho preparation with all mounting parts
- cover bore
- shaft-sealings
- special voltage
- anticondensation heater
- lateral cable-outlet
- special flanges
- special electrical equipment:
- one-way-, bridge-, and switching- rectifier
- overvoltage protection element
- brake control unit = BCU 2001
- brake control and monitoring system = BCMS-4

Please Note

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PINTSCH BUBENZER Service

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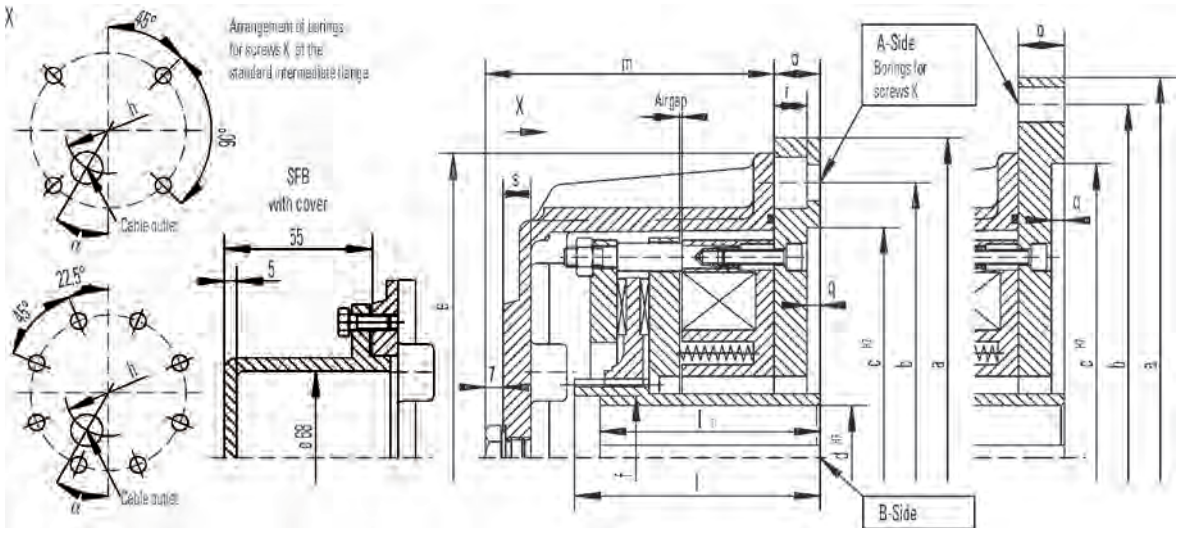
Spring-Set Brake SFB

Electromagnetic Two-Disc Spring-Set Brake

PINTSCH BUBENZER

Rev. 05-08



Keyways for keys acc. to DIN6885 Bl.1, width accuracy P9. Protection IP67

Alterations reserved without notice

Brake size				SFB 6.3	SFB 10	SFB 16	SFB 25	SFB 40	SFB 63	SFB 100	SFB 160	SFB 250
Brake torque M2 dynamic acc. to DIN VDE 0580			Nm	63	100	160	250	400	630	1000	1600	2500
				54	80	130	210	330	520	830	1300	2100
				45	63	100	180	260	400	660	1050	1650
Mass moment of inertia			kgm²	0.0017	0.0037	0.0048	0.0068	0.0175	0.036	0.050	0.128	0.140
Mass (weight)			kg	19	28	42	55	74	106	168	242	306
max. speed			min⁻¹	6000	6000	6000	5500	4700	4000	3600	3200	2800
Coil b. 20° C	Nominal voltage		V DC	110	110	110	110	110	110	110	110	110
	Nominal power		W	99	128	158	196	220	307	344	435	495
	Nominal current		A	0.90	1.16	1.44	1.78	2.0	2.79	3.13	3.95	4.50
Airgap, brake OFF			min. mm	0.3	0.3	0.3	0.4	0.4	0.4	0.6	0.4	0.4
			max. mm	0.9	1.2	1.2	1.3	1.4	1.8	1.8	2.3	2.5
Diameter mm	B-Side	d	Rough boring	26	26	36	36	36	36	36	46	46
		d^{H7}	Preferential boring	28	28	38	38	48	60	60	65	65
				32	32	42	42	55	65	65	70	70
				38	38	48	48	60	75	75	75	75
						55	55				80	80
											90	90
		d^{H7}	maximal	40	40	55	55	60	75	75	110	110
Lenghts mm		e		238	260	280	318	400	440	446	540	556
		f							95	95	128	128
		h		150	180	202	214	244	292	330	394	440
		l		96	96	117	117	142	148	148	191	191
		l^1		96	96	117	117	142	142	142	171	171
		m		115	118	137	143	169	171	183	211	232
		s		11	11	11	12	14	15	15	15	15
∢		α °		15	15	30	22.5	30	30	30	30	45
Suitable standard Intermediate flange				A250	A300	A300-1	A350	A400-1	A450-1	A450-1	A550-1	A660
				A300	A350	A350	A400	A450	A550	A550	A660	A800
						A400	A450	A550	A660	A660	A800	
						A450						

				Dimensions of standard intermediale flanges									
Standard intermediate flange				A250	A300	A300-1	A350	A400	A400-1	A450	A450-1	A550	A550-1	A660	A800
Diameter mm	a			250	300	300	350	400	400	450	450	550	550	660	800
	b			215	265	265	300	350	350	400	400	500	500	600	740
	c^{H7}			180	230	230	250	300	300	350	350	450	450	550	680
Lenghts mm	o			18	18	18	20	22	22	24	24	24	24	30	30
	q			5	5	5	6	6	6	6	6	6	6	7	7
	r			13		13			17.5		17.5		17.5		
Screws	k			4xM12	4xM12	4xM12	4xM16	4xM16	4xM16	4xM12	8xM16	8xM16	8xM16	8xM20	8xM20

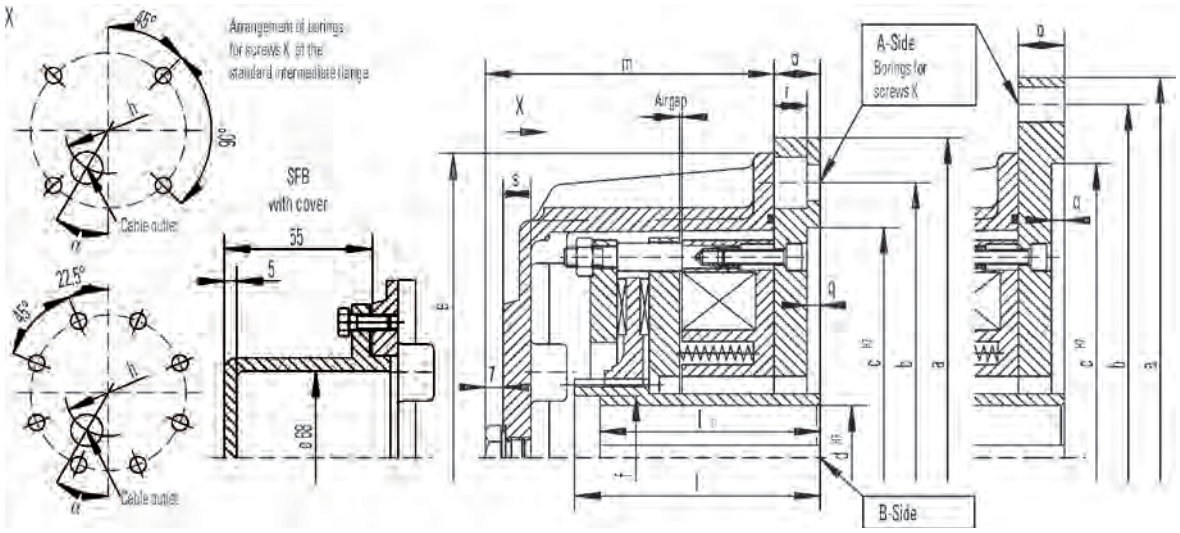
C

Spring-Set Brake SFB

Electromagnetic Two-Disc Spring-Set Brake

PINTSCH BUBENZER

Rev. 05-08



Brake size				SFB 400	SFB 630	SFB 1000
Brake torque M2 dynamic acc. to DIN VDE 0580			Nm	4000	6300	10000
				3350	5250	8500
				2650	4200	7000
Mass moment of inertia			kgm ²	0.325	0.375	1.007
Mass (weight)			kg	357	500	750
max. speed			min ⁻¹	2500	2200	2000
Coil b. 20° C	Nominal voltage		V DC	110	110	110
	Nominal power		W	553	671	980
	Nominal current		A	5.03	6.10	8.91
Airgap, brake OFF			min. mm	0.4	0.7	0.7
			max. mm	2.5	2.8	3.1
Diameter mm	B-Side	d	Rough boring	46	58	68
		d H7	Preferential boring	65	100	125
				70		
				75		
				80		
				90		
		d H7	maximal	110	125	140
Lenghts mm		e		660	700	795
		f		128	140	155
		h		520	570	620
		l		191	237	282
		l 1		171	210	255
		m		272	310	360
		s		15	15	15
∢		α °		30	30	30
Suitable standard intermediate flange				A660-1	A800	A800-1
				A800		
				Dimensions of standard intermediate flange		
Standard intermediate flange				A660-1	A800	A800-1
Diameter mm		a		600	800	800
		b		600	740	740
		c H7		550	680	680
Lenghts mm		o		30	30	30
		q		7	7	7
		r		21.5		21.5
Screws		k		8xM20	8xM20	8xM20

Keyways for keys acc. to DIN6885 Bl.1, width accuracy P9. Protection IP67

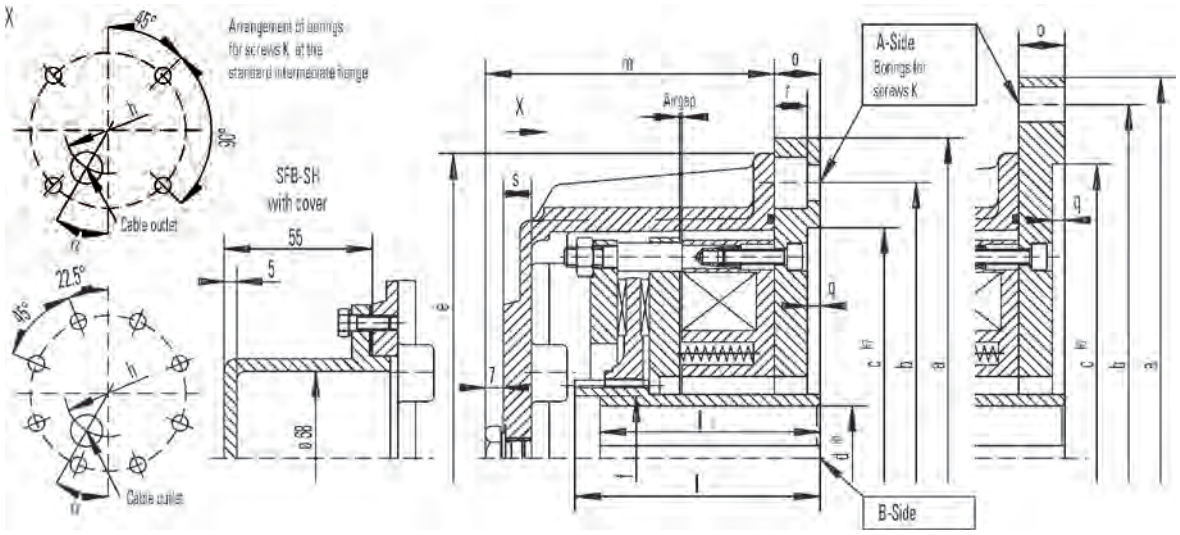
Alterations reserved without notice

Spring-Set Brake SFB-SH

Electromagnetic Two-Disc Spring-Set Brake
Increased brake-torque

PINTSCH BUBENZER

Rev. 05-08



Keyways for keys acc. to DIN6885 Bl.1, width accuracy P9. Protection IP67

Alterations reserved without notice

Brake size				SFB 6.3-SH	SFB 10-SH	SFB 16-SH	SFB 25-SH	SFB 40-SH	SFB 63-SH	SFB 100-SH	SFB 160-SH	SFB 250-SH
Brake torque M2 dynamic acc. to DIN VDE 0580			Nm	80	130	210	350	550	800	1300	2100	3300
				75	120	190	310	490	750	1200	1900	3000
				69	110	180	275	440	690	1100	1750	2750
Mass moment of inertia			kgm ²	0.0017	0.0037	0.0048	0.0068	0.0175	0.036	0.050	0.128	0.140
Mass (weight)			kg	19	28	42	55	74	106	168	242	306
max. speed			min -1	6000	6000	6000	5500	4700	4000	3600	3200	2800
Coil b. 20° C	Nominal voltage		V DC	110	110	110	110	110	110	110	110	110
	Nominal power		W	99	128	158	196	220	307	344	435	495
	Nominal current		A	0.90	1.16	1.44	1.78	2.0	2.79	3.13	3.95	4.50
Airgap, brake OFF			min. mm	0.3	0.3	0.3	0.4	0.4	0.4	0.6	0.4	0.4
			max. mm	0.9	1.2	1.2	1.3	1.4	1.8	1.8	2.3	2.5
Diameter mm	B-Side	d Rough boring		26	26	36	36	36	36	36	46	46
		d H7 Preferential boring		28	28	38	38	48	60	60	65	65
				32	32	42	42	55	65	65	70	70
				38	38	48	48	60	75	75	75	75
						55	55				80	80
											90	90
		d H7 maximal		40	40	55	55	60	75	75	110	110
Lenghts mm		e		238	260	280	318	400	440	446	540	556
		f							95	95	128	128
		h		150	180	202	214	244	292	330	394	440
		l		96	96	117	117	142	148	148	191	191
		l 1		96	96	117	117	142	142	142	171	171
		m		115	118	137	143	169	171	183	211	232
		s		11	11	11	12	14	15	15	15	15
∢		α °		15	15	30	22.5	30	30	30	30	45
Suitable standard intermediate flange				A250	A300	A300-1	A350	A400-1	A450-1	A450-1	A550-1	A660
				A300	A350	A350	A400	A450	A550	A550	A660	A800
						A400	A450	A550	A660	A660	A800	
						A450						

		Dimensions of standard intermediate flange											
Standard intermediate flange		A250	A300	A300-1	A350	A400	A400-1	A450	A450-1	A550	A550-1	A660	A800
Durchmesser mm	a	250	300	300	350	400	400	450	450	550	550	660	800
	b	215	265	265	300	350	350	400	400	500	500	600	740
	c H7	180	230	230	250	300	300	350	350	450	450	550	680
Länge mm	o	18	18	18	20	22	22	24	24	24	24	30	30
	q	5	5	5	6	6	6	6	6	6	6	7	7
	r	13		13			17.5		17.5		17.5		
Screws	k	4xM12	4xM12	4xM12	4xM16	4xM16	4xM16	8xM16	8xM16	8xM16	8xM16	8xM20	8xM20

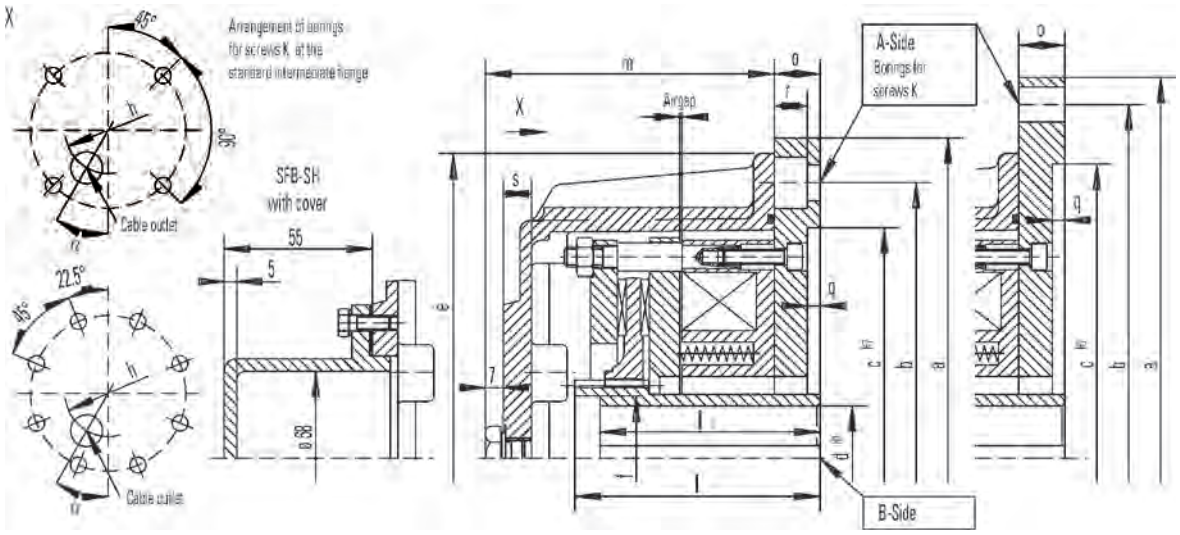
C

Spring-Set Brake SFB-SH

Electromagnetic Two-Disc Spring-Set Brake
Increased brake-torque

PINTSCH BUBENZER

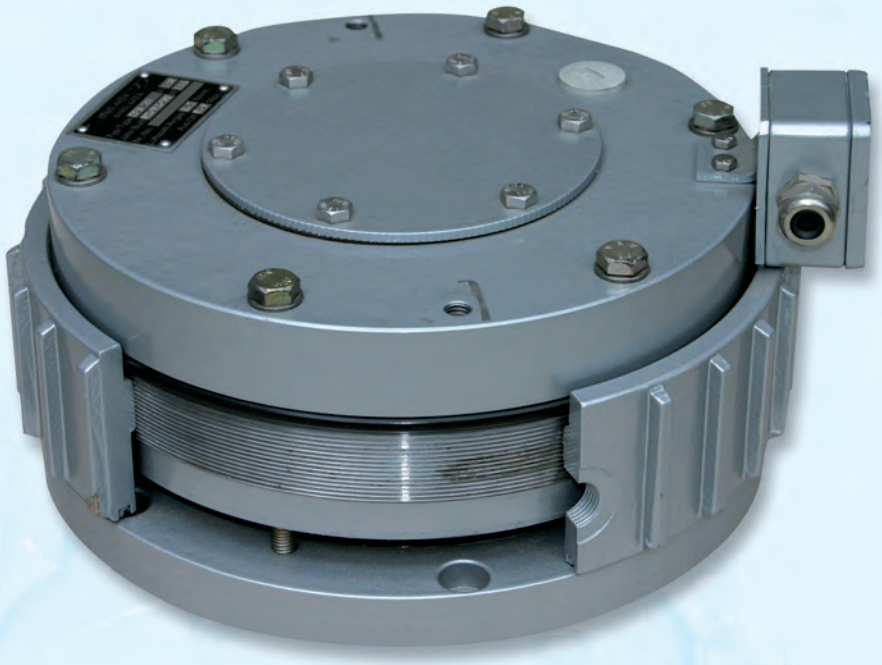
Rev. 05-08



Brake size				SFB 400-SH	SFB 630-SH	SFB 1000-SH
Brake torque M2 dynamic acc. to DIN VDE 0580			Nm	5200	8000	13000
				4800	7500	
				4400	6900	
Mass moment of inertia			kgm²	0.325	0.375	1.007
Mass (weight)			kg	357	500	750
max. speed			min⁻¹	2500	2200	2000
Spule b. 20° C	Nominal voltage		V DC	110	110	110
	Nominal power		W	553	671	980
	Nominal current		A	5.03	6.10	8.91
Airgap, brake OFF			min. mm	0.4	0.7	0.7
			max. mm	2.5	2.8	3.1
Diameter mm	B-Side	d	Rough boring	46	58	68
		d H7	Preferential boring	65	100	125
				70		
				75		
				80		
				90		
		d H7	maximal	110	125	140
Lenghts mm		e		660	700	795
		f		128	140	155
		h		520	570	620
		l		191	237	282
		l 1		171	210	255
		m		272	310	360
		s		15	15	15
∢		α °		30	30	30
Suitable standard intermediate flange				A660-1	A800	A800-1
				A800		
				Dimensions of standard intermediate flange		
Standard intermediate flange				A660-1	A800	A800-1
Durchmesser mm	a			600	800	800
	b			600	740	740
	c H7			550	680	680
Länge mm	o			30	30	30
	q			7	7	7
	r			21.5		21.5
Screws	k			8xM20	8xM20	8xM20

Keyways for keys acc. to DIN6885 Bl.1, width accuracy P9. Protection IP67

Alterations reserved without notice



PINTSCH BUBENZER
is certified according to
DIN EN ISO 9001:2000

Reliable | High Performance | Robust | Easy Maintenance | Compact | Tried and Trusted

Description EFB Series

Main Features

- spring applied safety brake
- electromagnetic lifting
- protection-class IP54
- high wear reserve by air gap adjustment
- small construction at high work capacity
- high wear resistance because of high abrasion resistance
- manual lifting

Options

- IEC standard flange
- special flange
- pinion
- handlever
- special brake torque
- lateral cable outlet
- tacho preparation with all mounting parts
- cover bore
- special voltage
- special electrical equipment:
- one-way-, bridge-, and switching- rectifier
- overvoltage protection element

Applications

- dynamic and static use in general industrial application for example:
- textile- machinery
- tool- machinery
- conveyor- drives
- overhead industrial crane

Please Note

We supply a detailed operating manual with every order. Nevertheless, we would point out that brakes are only as safe as the servicing and maintenance performed while they are in operation. The guarantee for the correct functioning of our brakes is therefore only valid if the user adheres to the German DIN standard 15434 part 2 (drum and disc brakes, servicing and maintenance in operation), or to comparable standards in his own country.

PINTSCH BUBENZER Service

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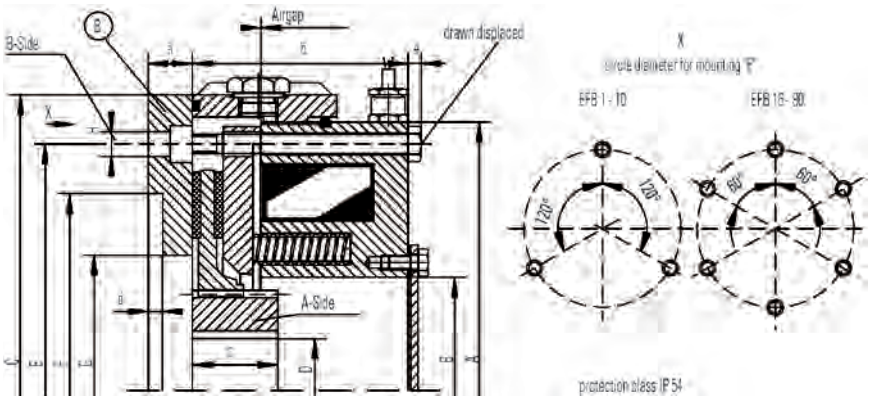
Spring-Set Brake EFB

Dimensions and technical data

PINTSCH BUBENZER

Rev. 05-08



Ⓐ switched on DC side
operate time = release time

Ⓑ Produced drawn with smallest possible mounting flange

Keyways for keys acc. to DIN6885 Bl.1, width accuracy P9. Protection IP67

Produced and tested acc. to DIN 0580
Alterations reserved without notice

Brake size				EFB 1	EFB 2.5	EFB 5	EFB 10	EFB 16	EFB 25	EFB 40	EFB 63	EFB 80
Brake torque			Nm	10	25	50	100	160	250	400	630	800
Moment of inertia			kgcm²	0.82	2.32	4.76	12	22	30	52	155	298
Mass (weight)			kg	2.5	5.0	8.9	13.5	18.8	23.3	41.7	61.8	73.9
max. speed			17 min	6000	5500	5000	4800	4500	4300	3800	3500	3000
Coil b. 20° C	Nominal voltage		V –	24	24	24	24	24	24	24	24	24
	Nominal power		W	31	48	69	97	105	127	181	246	255
	Nminal current		A	1.29	2.00	2.88	4.04	4.38	5.29	7.54	10.3	10.6
Airgap, OFF			norm. mm	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
			max. mm	0.5	0.6	0.7	0.8	0.9	0.9	1.2	1.5	1.6
Durchmesser mm	A-Seite	D Rough boring		8	8	8	26	26	36	36	36	36
		d H7 Preferential boring										
				15	20	25	30	35	40	45	60	60
				20	25	30	35	40	45	50	70	70
		D H7 maximal		20	25	30	40	45	50	60	80	70
		A		101.9	131.9	153.2	181.2	207.2	220.8	266.8	316.4	319.4
		B		38	52	62	76	82	88	110	136	128
		C		112	145	172	200	226	240	290	340	344
		E	± 0.2	90	117	134	162	184	200	240	290	280
		F	H7	70	95	110	130	150	160	180	230	230
		G		45	60	70	90	100	110	120	170	160
		H		5.5	6.6	9	9	9	9	11	14	14
Lenghts mm		a		10	12	15	15	15	19	20	22	25
		b		46	54	66	75	81	86	106	114	132
		c	-0.2	20	25	30	35	40	40	50	60	60
		d		3	4	4	5	5	6	6	6	6
		e		3.5	4	5.5	5.5	5.5	5.5	7	8	8
Ⓐ	Operate time t1		ms									
	Drop time t2		ms									

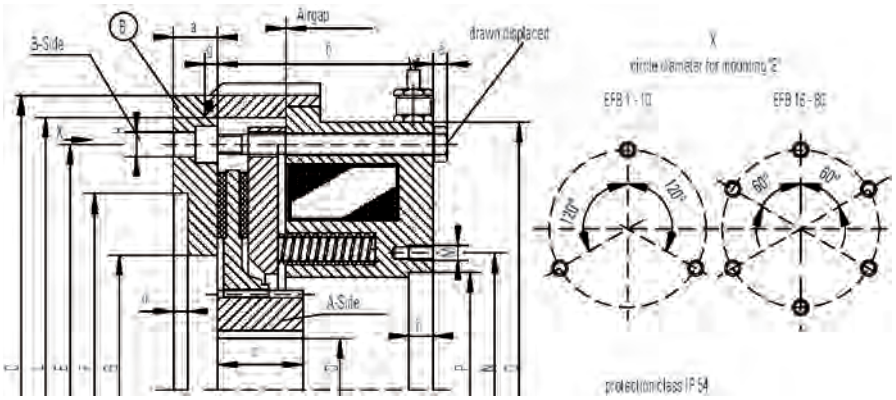
C

Spring-Set Brake EFB-T

With tacho mounting possibility

PINTSCH BUBENZER

Rev. 05-08



Ⓐ switched on DC side
operate time = release time

Ⓑ Produced drawn with smallest possible mounting flange

Keyways for keys acc. to DIN6885 Bl.1, width accuracy P9. Protection IP67

Produced and tested acc. to DIN 0580
Alterations reserved without notice

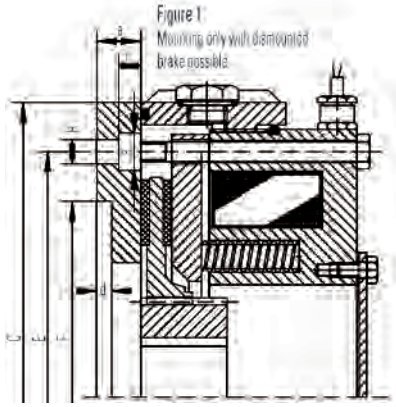
Brake size				EFB 1 T	EFB 2.5 T	EFB 5 T	EFB 10 T	EFB 16 T	EFB 25 T	EFB 40 T	EFB 63 T	EFB 80 T
Brake torque			Nm	10	25	50	100	160	250	400	630	800
Moment of inertia			kgcm²	0.82	2.32	4.76	12	22	30	52	155	298
Mass (weight)			kg	2.5	5.0	8.9	13.5	18.8	23.3	41.7	61.8	73.9
max. speed			17 min	6000	5500	5000	4800	4500	4300	3800	3500	3000
Coil b. 20° C	Nominal voltage		V –	24	24	24	24	24	24	24	24	24
	Nominal power		W	31	48	69	97	105	127	181	246	255
	Nomianl current		A	1.29	2.00	2.88	4.04	4.38	5.29	7.54	10.3	10.6
Airgap, OFF			norm. mm	0.2	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4
			max. mm	0.5	0.6	0.7	0.8	0.9	0.9	1.2	1.5	1.6
Diameter mm	A-Seite	D Rough boring		8	8	8	26	26	36	36	36	36
		d H7 Preferential boring										
				15	20	25	30	35	40	45	60	60
				20	25	30	35	40	45	50	70	70
		D H7 maximal		20	25	30	40	45	50	60	80	70
		C		112	145	172	200	226	240	290	340	344
		E	± 0.2	90	117	134	162	184	200	240	290	280
		F	H7	70	95	110	130	150	160	180	230	230
		G		45	60	70	90	100	110	120	170	160
		H		5.5	6.6	9	9	9	9	11	14	14
		L	H7 / f7	102	133	154	182	208	222	270	320	322
		M		4xM5	4xM5	4xM6	6xM6	6xM6	6xM6	6xM8	6xM10	6xM10
		N		50	65	76	92	100	110	130	160	150
		O		100	130	150	178	204	218	266	316	316
		P	H7	40	55	65	80	86	92	114	140	132
Lenghts mm		a		10	12	15	15	15	19	20	22	25
		b		46	54	66	75	81	86	106	114	132
		c	-0.2	20	25	30	35	40	40	50	60	60
		d		3	4	4	5	5	6	6	6	6
		e		3.5	4	5.5	5.5	5.5	5.5	7	8	8
		g		3	3	4	4	5	5	5	5	5
		h		5	5	7	10	10	10	12	15	15
Ⓐ	Operate time t1		ms									
	Drop time t2		ms									

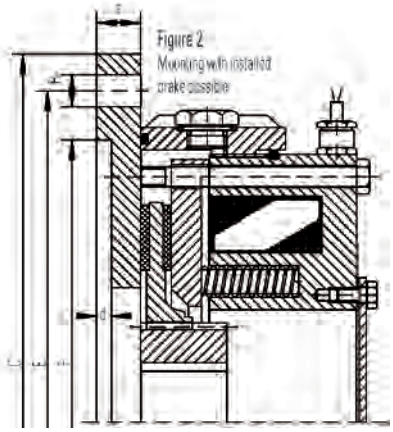
Spring-Set Brake EFB

Electromagnetic Two-Disc Spring-Set Brake
Intermediate flanges

PINTSCH BUBENZER

Rev. 05-08





Standard flange = intermediate flange at standard flange acc. to DIN 42948 form A

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Brake size		EFB 1	EFB 2.5	EFB 5	EFB 10	EFB 16	EFB 25	EFB 40	EFB 63	EFB 80
Standard flange Figure 1		A120 A140 A160	A160 A200	A200	A200 A250	A250	A250 A300	A300 A350	A350 A400	A350 A400
Standard flange Figure 2		A200-1 ↓	A250-1 ↓	A250-1 ↓	A300-1 ↓	A300-1 ↓	A350-1 ↓	A400-1 ↓	A450-1 ↓	A450-1 ↓
		Dimensions of standard intermediate flanges								
Size of standard flange figure 1		A120	A140	A160	A200	A250	A300	A350	A400	
Diameter mm	C	120	140	160	200	250	300	350	400	
	E	100	115	130	165	215	265	300	350	
	F H7	80	95	110	130	180	230	250	300	
	H	4 x ø6.6	4 x ø9	4 x ø9	4 x ø11	4 x ø14	4 x ø14	4 x ø18	4 x ø18	
	R	4 x ø11	4 x ø15	4 x ø15	4 x ø18	4 x ø20	4 x ø20	4 x ø26	4 x ø26	
Lenghts mm	a	15	20	20	20	25	25	30	30	
	d	5	5	5	5	6	6	7	7	
	i	10	13	13	15	19	19	22	22	
		Dimensions of standard intermediate flanges								
Size of standard flange figure 2		A200-1	A250-1	A300-1	A350-1	A400-1	A450-1	A550-1	A660-1	
Diameter mm	C	200	250	300	350	400	450	550	660	
	E	165	215	265	300	350	400	500	600	
	F H7	130	180	230	250	300	350	450	550	
	H	4 x ø11	4 x ø14	4 x ø14	4 x ø18	4 x ø18	8 x ø18	8 x ø18	8 x ø22	
	R	–	–	–	–	–	–	–	–	
Lenghts mm	a	20	25	25	30	30	30	30	30	
	d	5	6	6	7	7	7	7	7	
	i	–	–	–	–	–	–	–	–	

C