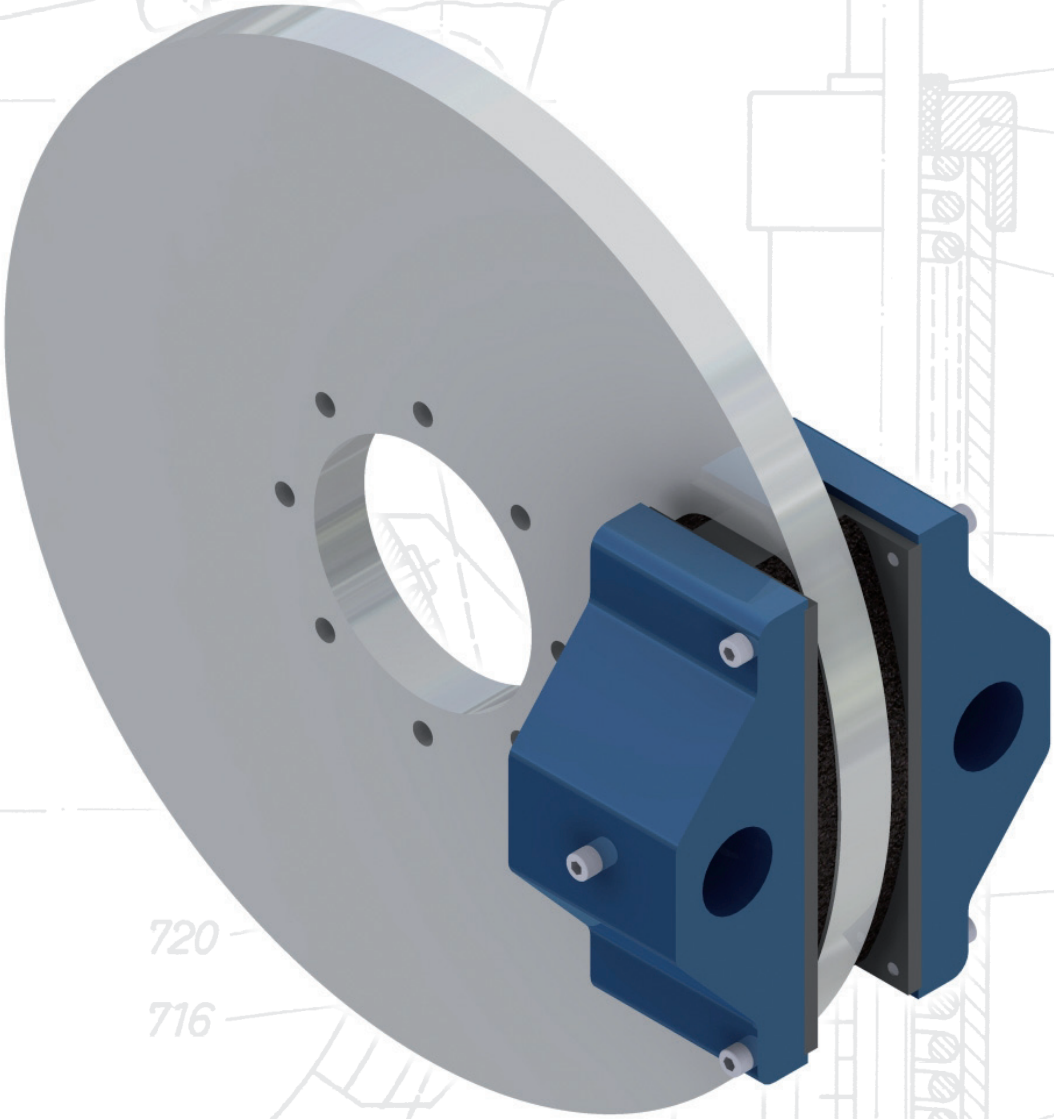
KoRo·IBS

MOVING AND BRAKE SYSTEM



Lining carriers, linings, brake disks and hubs

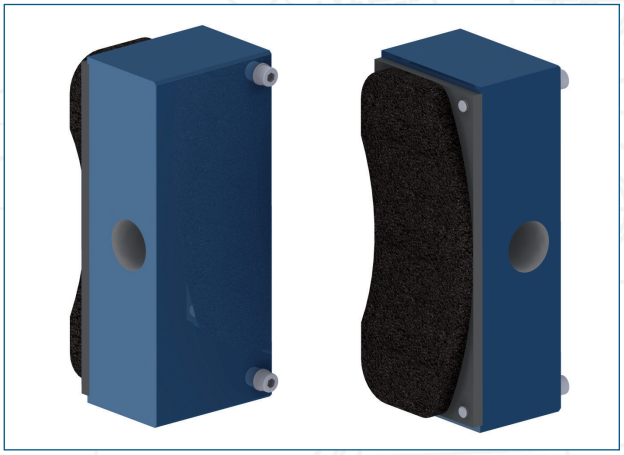
according to DIN 15 432 and DIN 15 436

KoRo·IBS
MOVING AND BRAKE SYSTEM

Lining carriers, linings, brake disks and hubs

according to DIN 15 432 and DIN 15 436

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

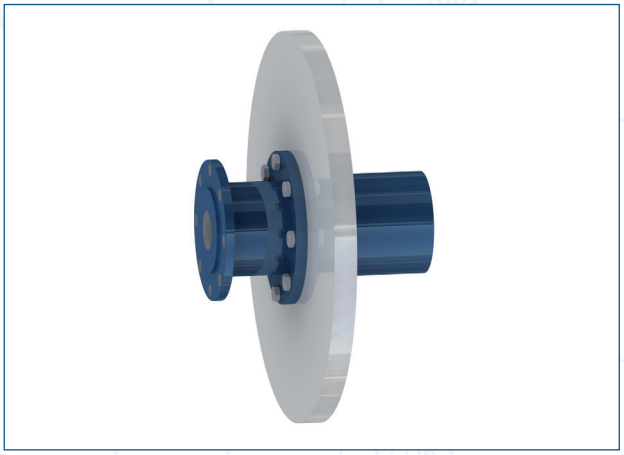


Lining Carrier

With bounded linings acc. to DIN 15 436

Design:

- SBB1
- SBB2
- SBB3



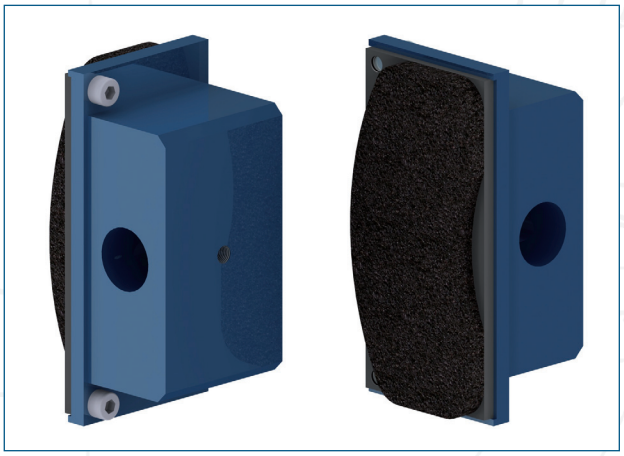
Linings

Design:

- SBB-51
- SBB-SM

SBB-51. Brake side and contact surface round, high-compressed, high density, tough preformed, grey black, asbestos free.

SBB-SM. Compression moulding sintered metal-friction material based on non-ferrous metals and special metal-free anorganic components to control the friction. Physical properties, extremely low wear, no stick-slip effect, goes easy on contact material.

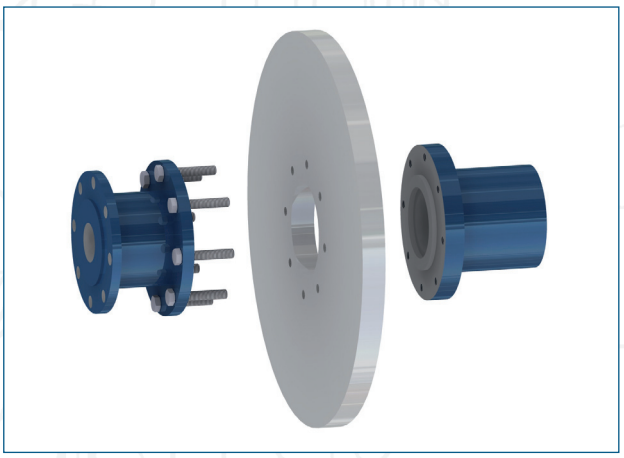


Brake Disks

Brake disks according to DIN 15 432 for SBB Disk brakes. Design with and without hub.

Design:

- made of steel St52-3 manufactured from solid
- special brake disks



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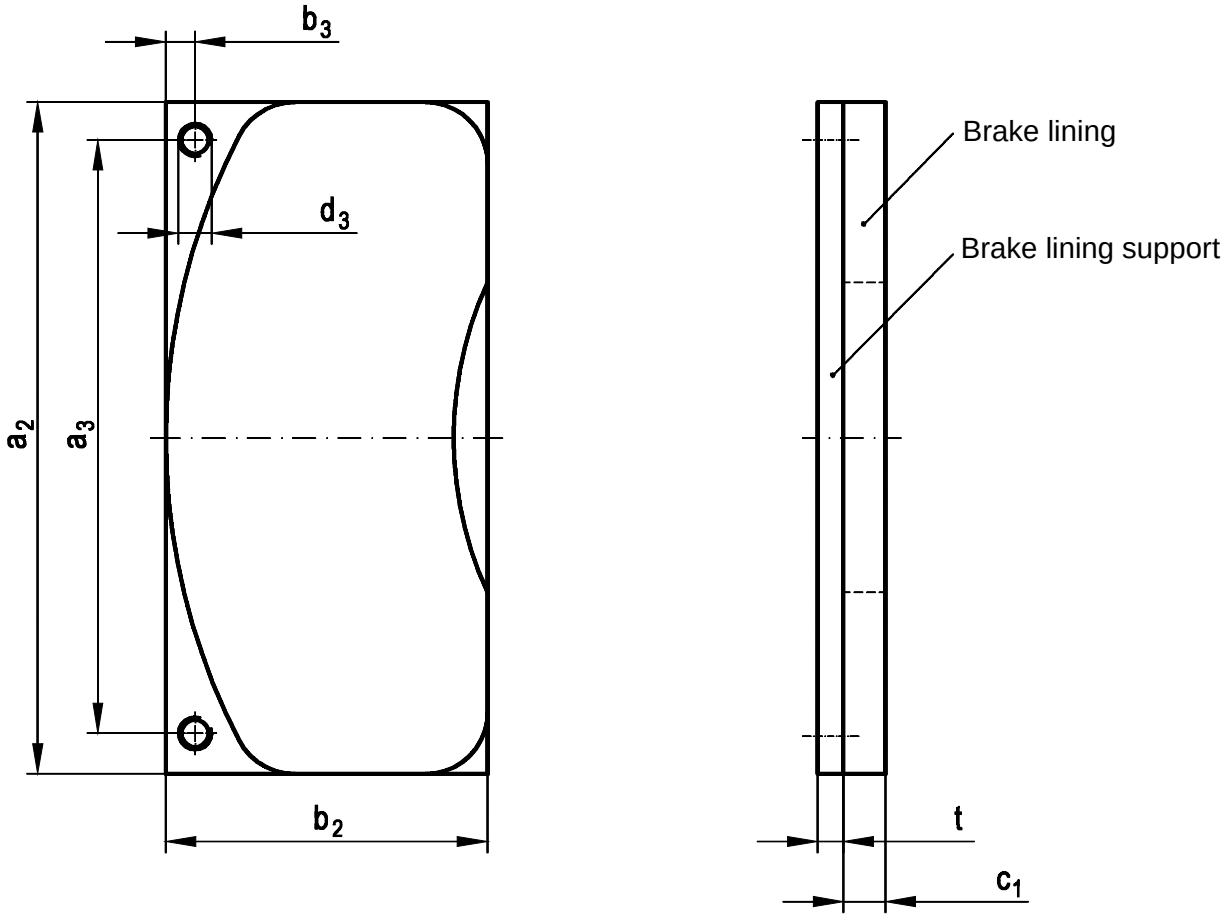
Brake Disks
Brake lining support



Dimensions in [mm]

Support for disk brake lining							
Size	**a2**	**a3**	**b2**	**b3**	**c1**	**d3**	**t**
SBB 1	160 – 0.2	148 ± 0.3	80	9.0	10	M8	6
SBB 2	230 – 0.2	212 ± 0.3	100	9.0	12	M8	8
SBB 3	300 – 0.2	275 ± 0.3	130	22.0	15	M8	10

Brake Disks
Brake lining type SBB-51

Description of material

Brake side and contact surface round, high-compressed, high density, tough preformed, grey black, asbestos free.

Recommended fields of application

Highly stressed couplings and brakes. Industrial disk brakes.

Technical data

Average dynamic friction coefficient μ (dry)_____ approx. 0.45

Recommended stress range

a) p max [daN/cm²]_____ 25
b) v max [m/s]_____ 50

Max. admissible temperatures [°C]

a) for permanent service _____ 350
b) temporary_____ 600

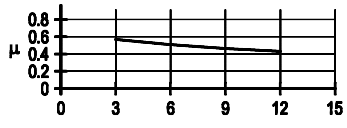
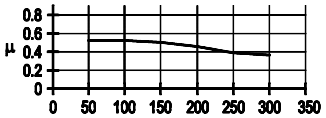
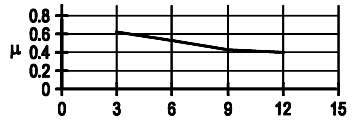
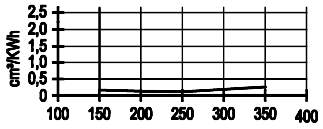
Spezific facts of products at 20°C

Hardness strength (DIN 53 456 [daN/cm²]) _____ approx. 900
Tensile strength (DIN 53 455 [daN/cm²]) _____ approx. 180
Impact strength (DIN 53 453 [daNcm/cm²]) _____ approx. 15
Specific weight (DIN 53 479 [g/cm²]) _____ 3.27
Bonding strength _____ good

Lining material is suitable for dry and oil service.

The max. permissible loads should not occur simultaneously. We are unable to offer you any guarantee for the various applications.

The friction coefficient which results from part lining tests cannot be transferred into practise before testing, mainly because of the friction rate.

 application force/ pressure daN/cm²	v=6m/s T=150°C	 temperature °C	permanent braking v=6m/s p=6 daN/cm²
 sliding speed m/s	p=6 daN/cm² T=150°C	 temperature °C	specific wear v=15m/s p=5 daN/cm²

Description of material

Compression moulding sintered metal-friction material based on non-ferrous metals and special metal-free inorganic components to control the friction physical properties, extremely low wear, no stick-slip effect, goes easy on contact material.

Recommended fields of application

High temperature disk brakes and couplings for industrial purposes, rail vehicles, wind power stations.

Technical data:

Average friction coefficient μ (dry)

dynamic	0.45
static	0.50

Admissible surface pressing dynamic [N/mm²]

time	12-20
temporary	45
static	200

Admissible runnng speed [m/s]

Time	90
temporary	110

Admissible temperature [°C]

for permanent service	950
temporary	1150

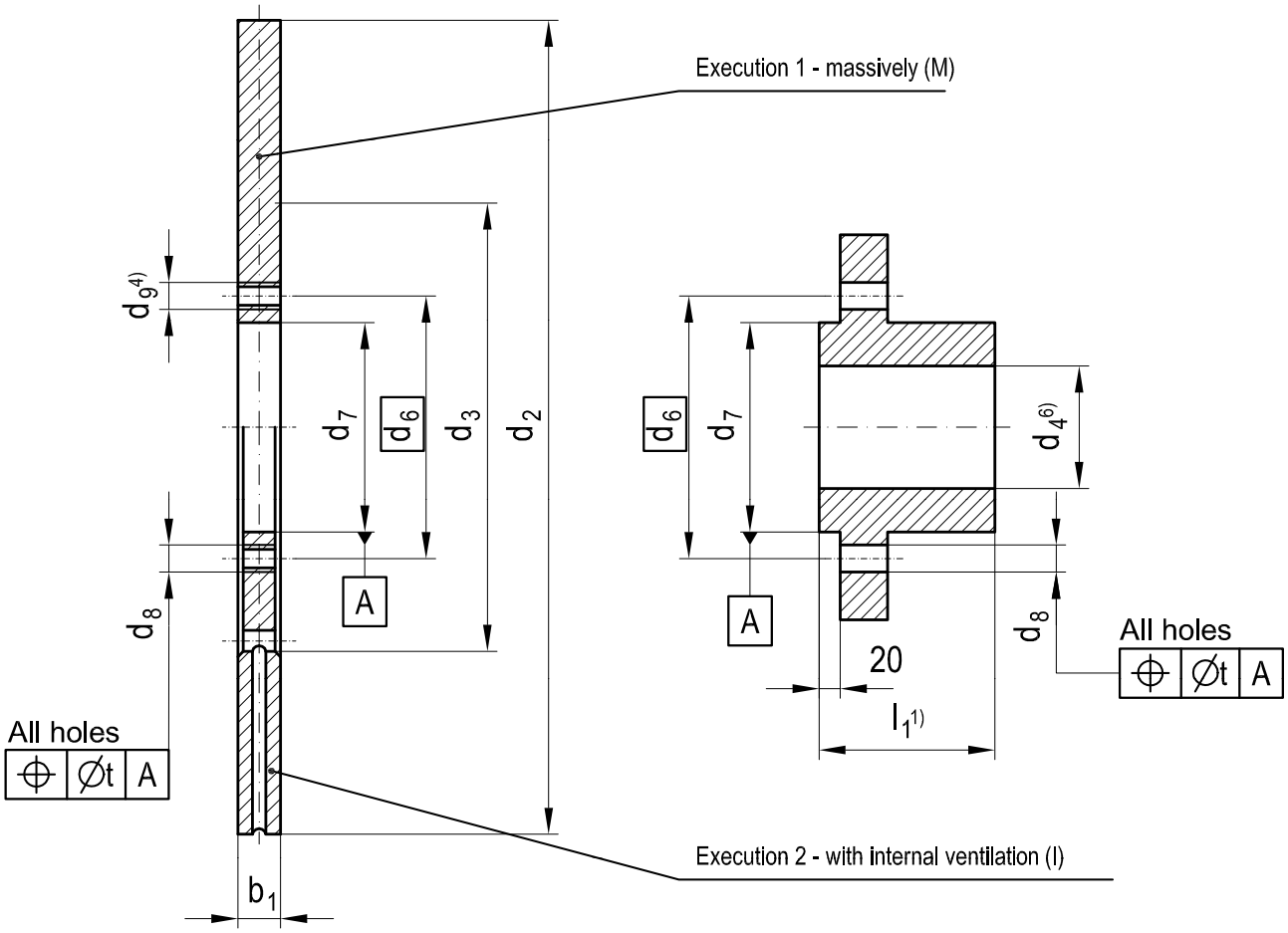
spezific facts of products at 20°C

tensile strength [N/mm²]	10
specific wear [cm³/kWh]	0.10
spezific weight [g/cm³]	5.2

Recommended contact material: steel from ST 37, grey cast iron, spheroidal-graphite cast iron. The mounting possibility is the soldered joint by intermetallic application and screws/ rivets by mecanical application.

Lining material is suitable for dry and oil service.

The data of this sheet is the result of part lining tests and represents average values. The max. permissible loads should not occur simultaneously. If there are any changes in quality or innovations, we recommend you the technical aptitude test to state the lining quality.



Dimensions in [mm]

d_2		b_1 [3]	d_3	d_4 [6]			d_6	d_7	d_8			d_9 [4]		
	Limit dim.			Pilot bore	* [2]	max.		H7/f7	Bore	Number of screws	Screws threads		Ø t	Tightening torque per screw in Nm [5]
315	±0.2	30	175	37	60	80	105	85	10.5	9	M10	M10	0.3	51
355	±0.2	30	200	46	60	80	125	105	13	9	M12	M12	0.3	89
400	±0.5	30	220	51	80	90	140	115	17	9	M16	M16	0.4	215
450	±0.5	30	250	56	80	100	146	120	17	12	M16	M16	0.4	215
500	±0.5	30	280	66	80	100	190	160	21	12	M20	M20	0.4	420
560	±0.5	30	310	75	100	125	190	160	21	12	M20	M20	0.5	420
630	±0.5	30	350	75	100	125	205	170	21	12	M20	M20	0.5	420
710	±0.5	30	390	95	120	140	230	195	25	12	M24	M24	0.5	725
800	±0.5	30	440	95	120	140	260	220	25	12	M24	M24	0.5	725
900	±0.5	30	500	120	140	160	260	220	25	12	M24	M24	0.5	725
1000	±0.5	30	560	120	140	160	260	220	25	12	M24	M24	0.5	725

[1] Length l_1 should be specified according to given shaft end, i.e.: shaft end of gear acc. To DIN 748 part 1. Tolerances of length acc. to DIN 7151 – lower limit of deviation 0, upper limit of deviation IT14. Keyway acc.t o DIN 6885 part 1.

[2] tob e used preferred

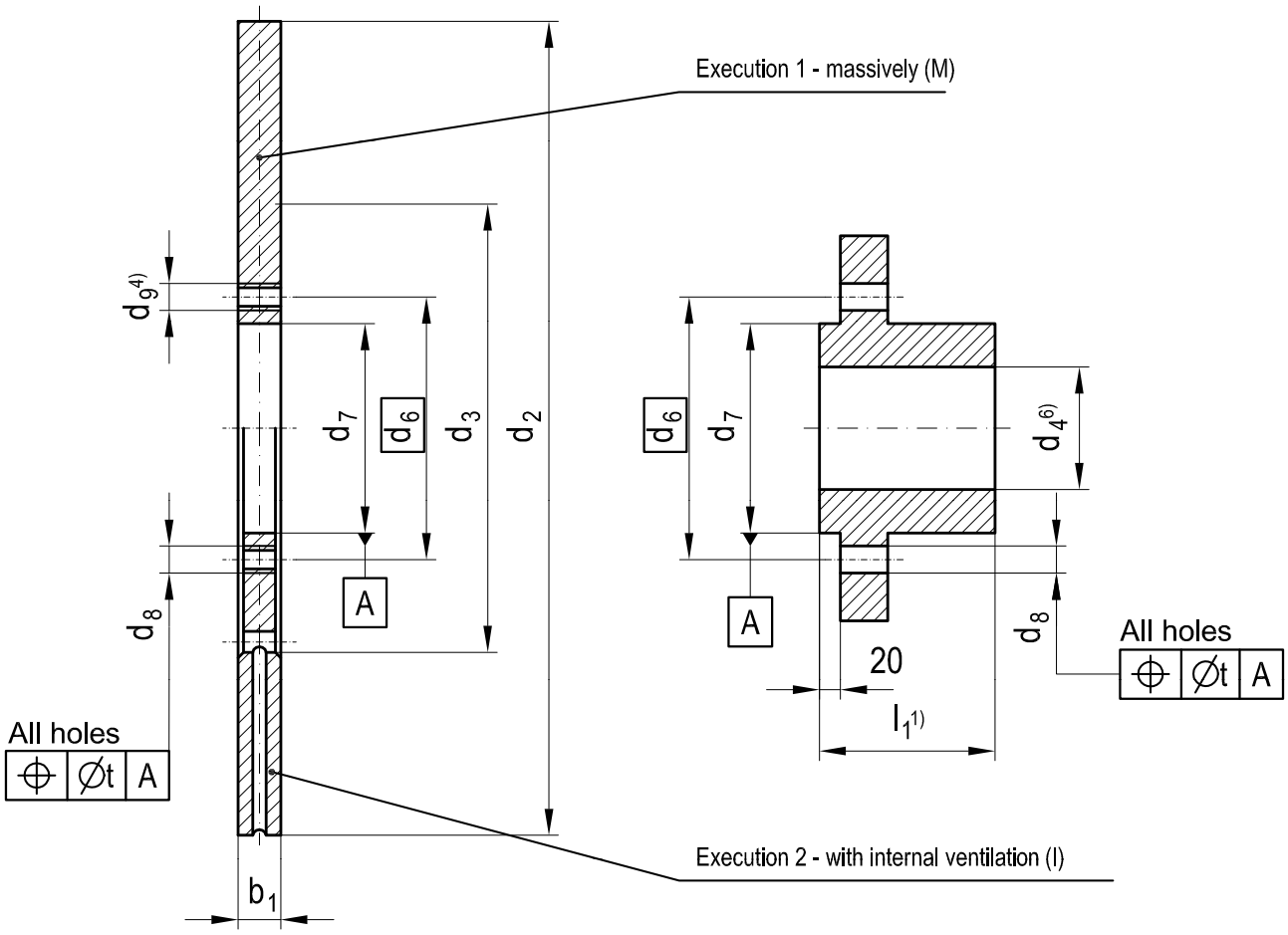
[3] General tolerances acc. To DIN 7168-m

[4] 3 bores with screw threads 9 at 120° are symmetrically placed at the disk brake in bolt circle d6 to remove at change of disk brake.

[5] Screws with nuts of strength class 8.8 with dynanometric key are prestressed at given data

[6] Tolerances of finish bored – H7

Brake Disks
Questionnaire for brake disks with hub



Disk brake with hub acc. to DIN 15 431

Necessary facts in mm:

Brake disk:

design: ☐ massive ☐ ventilated

Dimensions for **d_2**: _____

Dimensions for **d_3**: _____

Dimensions for **d_6**: _____

Dimensions for **d_7**: _____

Hub:

Dimensions for **d_4**: _____

Dimensions for **d_6**: _____as Brake disk_____

Dimensions for **d_7**: _____as Brake disk_____