

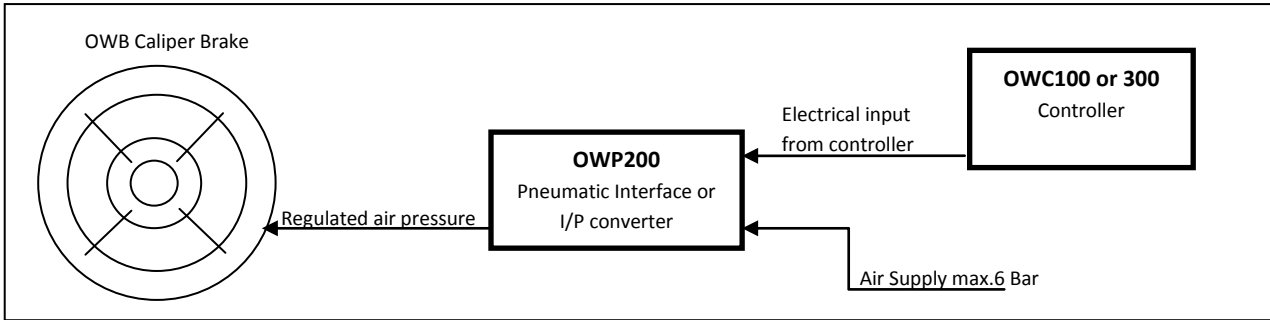
OWECON OWB250-300-400 Series Pneumatic Brake



The **OWECON OWB Caliper Series pneumatically controlled brake** is the new line of high torque caliper disc brakes for unwind solutions.

BEST PERFORMING BRAKE SYSTEM

- ✓ High performance, excellent heat dissipation
- ✓ Compact industrial design - small dimensions, large application range
- ✓ Flexible torque configuration, range up to 4392 NM
- ✓ Easy to integrate, designed to fit modern machine environment
- ✓ Easy to install and maintain
- ✓ Cost / Performance effective – “as little as possible, as much as necessary”
- ✓ Produced and supported by OWECON – unmatched customer service and quality

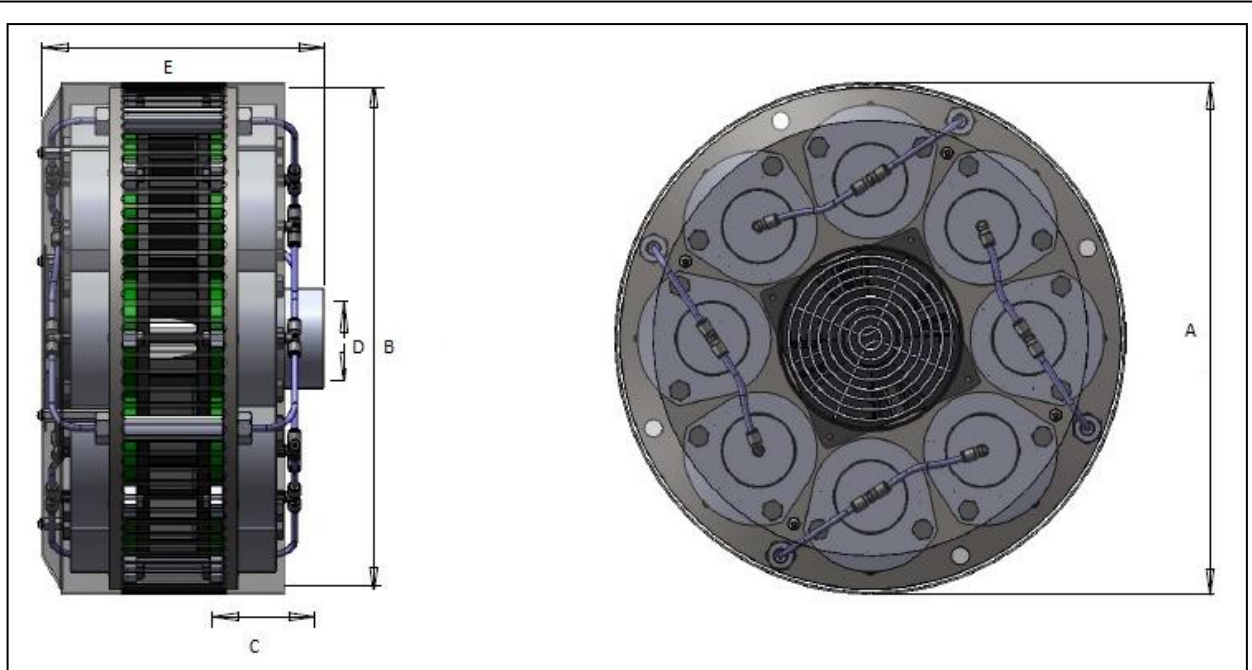


Applications:

The OWECON OWB caliper brakes are used as the braking force to control web tension in unwind applications. OWECON OWB caliper brakes will easily integrate with OWECON - or third party controllers and peripheral components on all types of web - process and converting machines.

Mechanical specifications

Design, mechanical dimensions:



Dimensions mm.					
Type	A	B	C	D (Shaft max \varnothing)	E
OWB250	310	303	70	40	187
OWB300	357	350	70	50	187
OWB400	460	454	78	90	195

Brake size guideline:

OWB250-02 to OWB250-12 = 2 to 12 modules
 OWB350-02 to OWB350-16 = 2 to 16 modules
 OWB400-02 to OWB400-24 = 2 to 24 modules

Electrical specifications:

Electric cooling fan, available as: 24VDC / 110VAC / 240VAC Version
 Power/Size depending on supply available and air volume needed.

Brake Torque and Heat specifications:

Lining coefficient:

Brakepads are available with :
 Standard coefficient = 0.45; low coefficient = 0.2;

OWB 250	Modules											
Braking torque at 6 Bar	2	4	6	8	10	12						
Standard coefficient 0.45	193	386	579	772	965	1158						
Low coefficient 0.2	85	170	255	340	425	510						

Heat dissipation capacity in KW

At RPM =	0	100	200	300	400	500	1000	1500	2000	2500	3000
Heat diss. with Fan (KW)	2,7	3,4	4,0	4,5	5,1	5,6	8,0	9,8	11,1	11,8	12,0

Max RPM = 3000 Weight of rotating parts = 11 Kg / Max. total weight = 25 Kg.

OWB 300	Modules											
Braking torque at 6 Bar	2	4	6	8	10	12	14	16				
Standard coefficient 0.45	250	500	750	1000	1250	1500	1750	2000				
Low coefficient 0.2	110	220	330	440	550	660	770	880				

Heat dissipation capacity in KW

At RPM =	0	100	200	300	400	500	1000	1500	2000	2500
Heat diss. with Fan (KW)	6,1	6,8	7,5	8,2	8,8	9,4	12,0	14,0	15,3	16,0

Max RPM = 2500 Weight of rotating parts 15 Kg / Max. total weight = 35 Kg.

OWB 400	Modules											
Braking torque at 6 Bar	2	4	6	8	10	12	14	16	18	20	22	24
Standard coefficient 0.45	366	732	1098	1464	1830	2196	2562	2928	3294	3660	4026	4392
Low coefficient 0.2	162	324	486	648	810	972	1134	1296	1458	1620	1782	1944

Heat dissipation capacity in KW

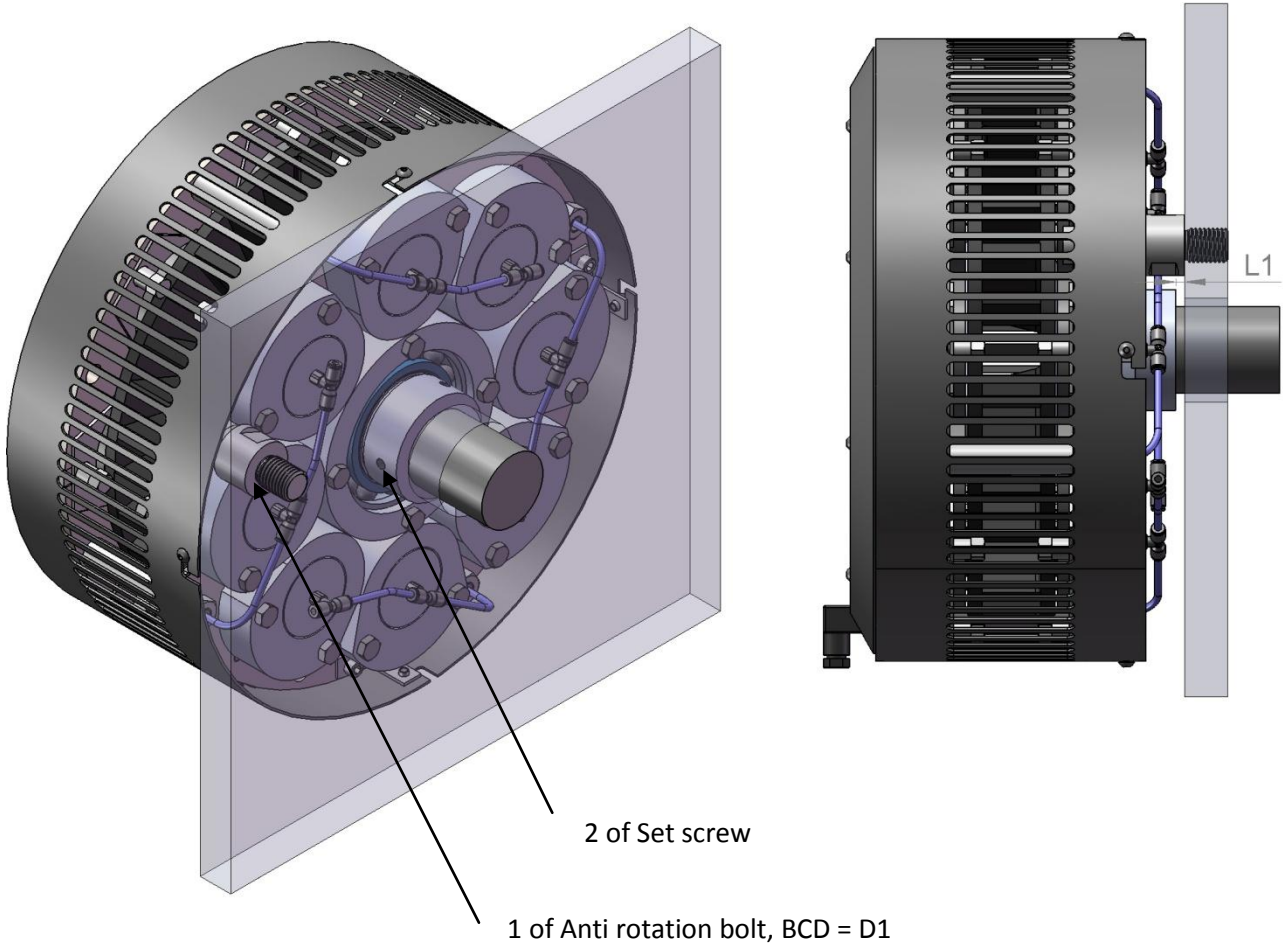
At RPM =	0	100	200	300	400	500	1000	1500	2000
Heat diss. with Fan (KW)	8,7	9,8	10,9	12,0	12,9	13,8	17,8	20,5	22,0

Max RPM = 2000 Weight of rotating parts 28 Kg / Max . total weight = 60 Kg.

Heat dissipation

The value of heat dissipation power has been obtained under the following test conditions:

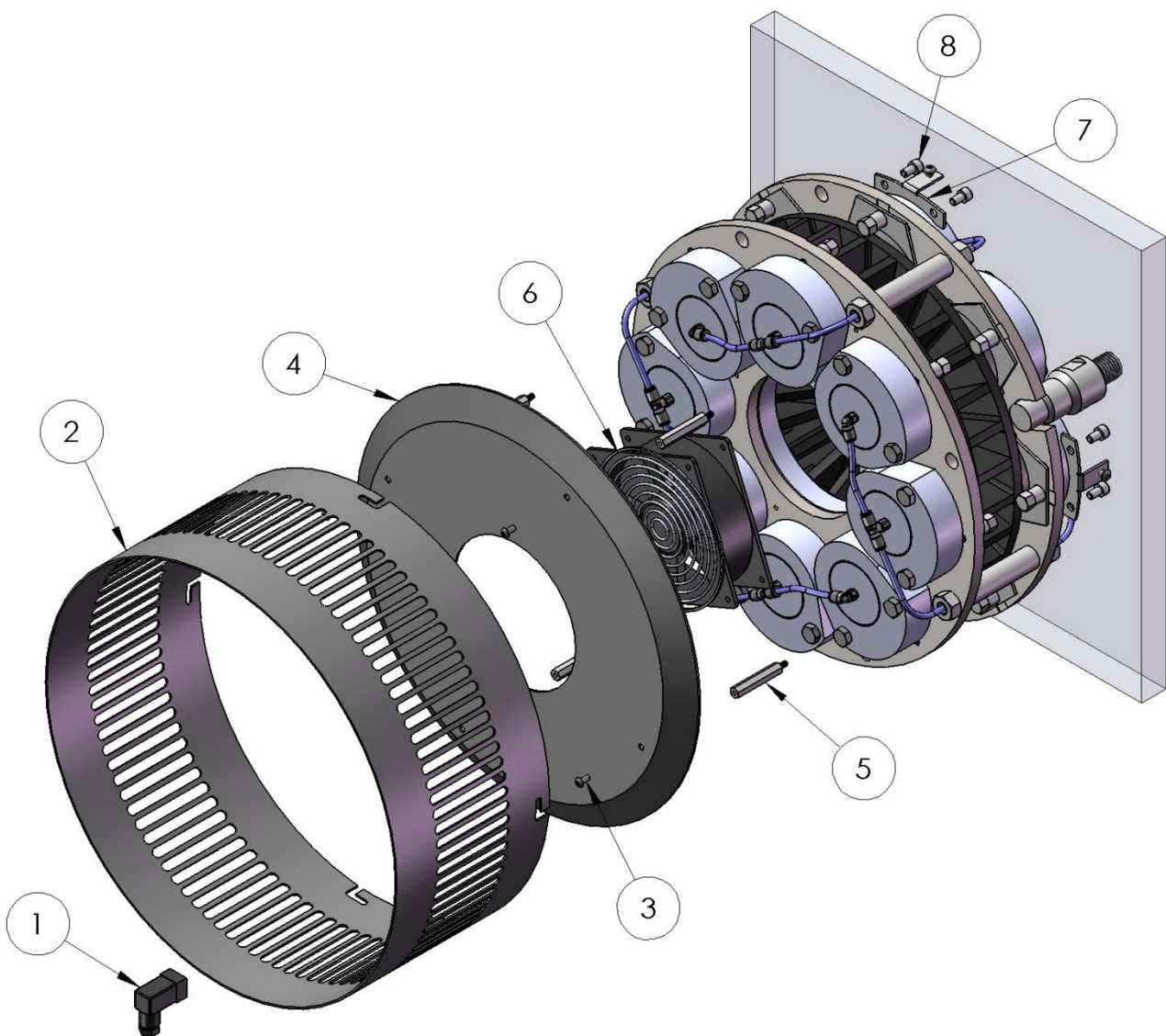
- Discs in continuous rotation with ambient temperature +25°
- Disc temperature 150 °C



	Bolt	BCD = D1	Set Screw	L1
OWB250	M16	138 mm	M6	5 mm
OWB300	M20	158 mm	M8	5 mm
OWB400	M20	212 mm	M10	5 mm

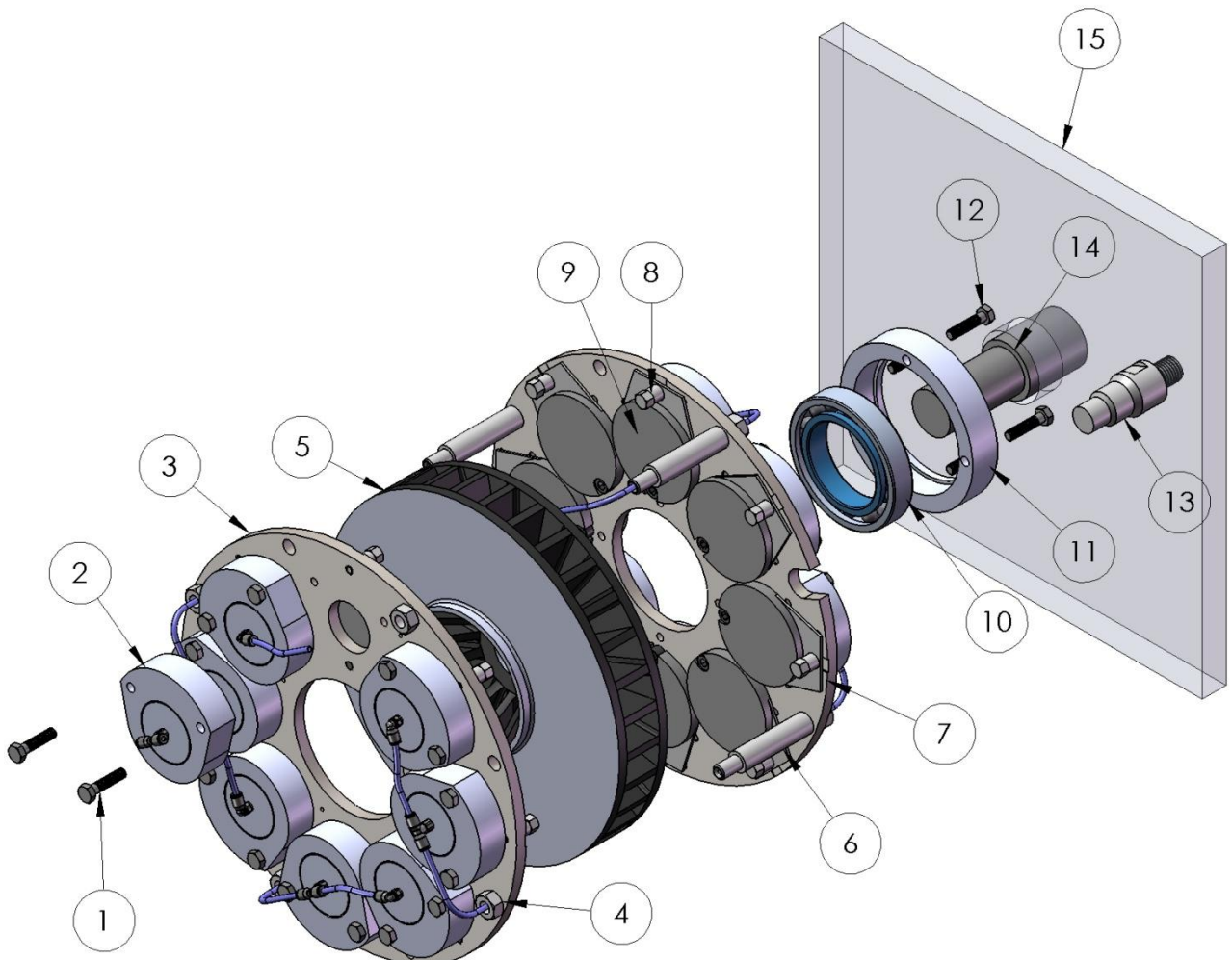
Cover and fan

Pos	Text	Qty
1	Power connector for fan	1
2	Ring cover	1
3	Screw for side cover	3 or 4
4	Side cover	1
5	Spacer bolt for cover	3 or 4
6	Cooling fan	1
7	Bracket for ring cover	3 or 4
8	Screw for bracket	6 or 8

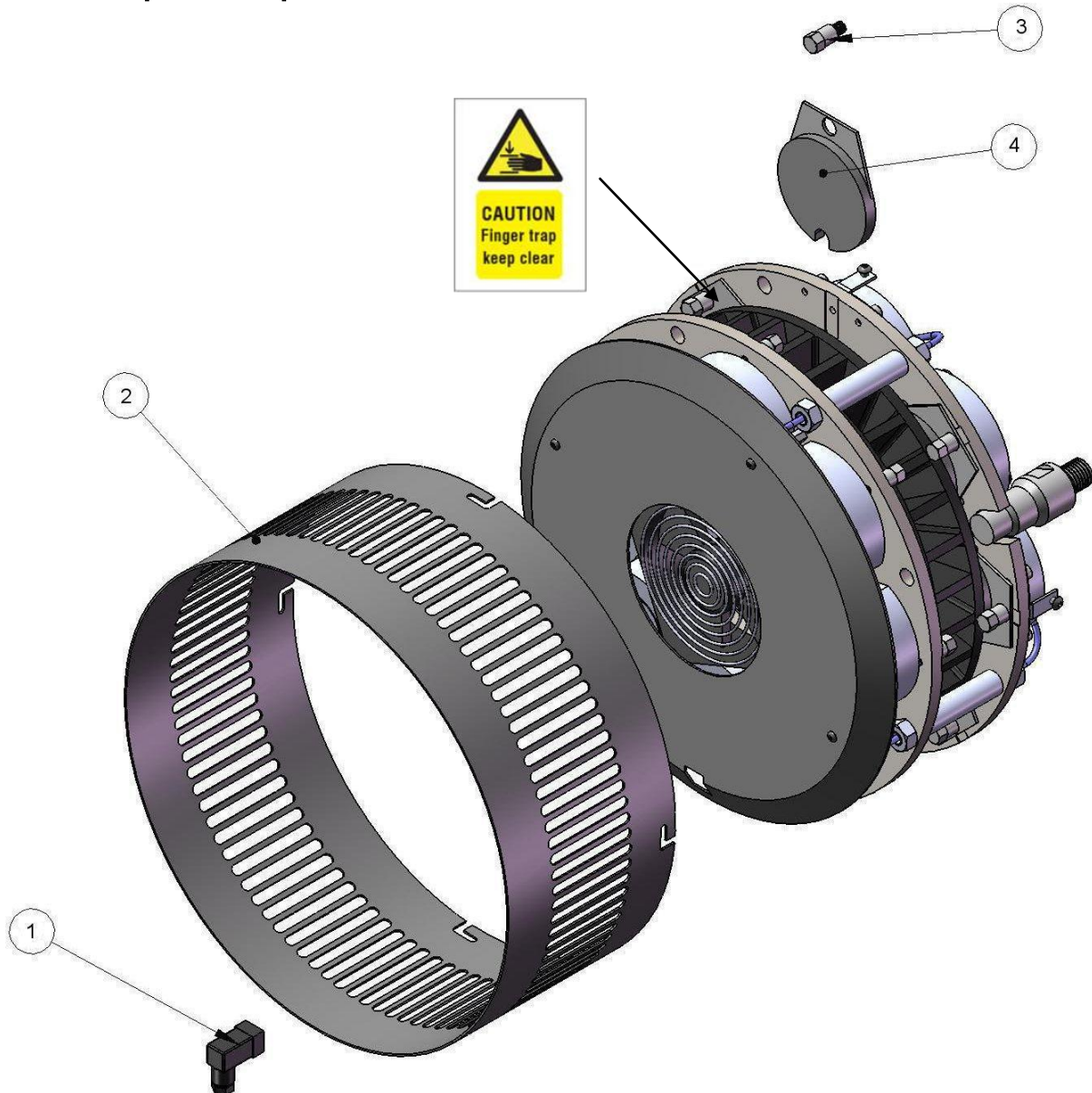


Brake assembly

Pos	Text	Qty
1	Bolt for friction module	2*
2	Friction module	Various
3	Spider plate front	1
4	Disc spacer nut	12 to 24
5	Brake disc	1
6	Disc spacer bolt	6 to 12
7	Spider plate back	1
8	Anti rotation screw	1*
9	Friction pad	1*
10	Bearing	1
11	Bearing housing	1
12	Bearing housing bolt	4
13	Anti rotation bolt	1
14	Machine shaft	
15	Machine side	
*Per friction module		



Friction pad replacement



1. Remove the power connector for cooling fan
2. Remove cover assembly.



Caution after removing cover, do not try to turn brake disc by hand, if necessary use a appropriate tool

3. Remove anti rotation screw
4. Remove used friction pad
5. Replace friction pad and reassembly in reverse order

Friction module

Pos	Text	Qty
1	Magnet	1
2	Piston assembly screw	1
3	Piston spring	2
4	Magnet piston part	1
5	Rolling diaphragm piston part	1
6	Rolling diaphragm	1
7	Rolling diaphragm fixation disc	1
8	Cylinder housing	1

