

OWECON OWB OWB250P-300P-350P Disc Brake



The **OWECON OWB250P-300P-350P Series pneumatically controlled brake** is the new line of high torque single disc brakes for unwind solutions.

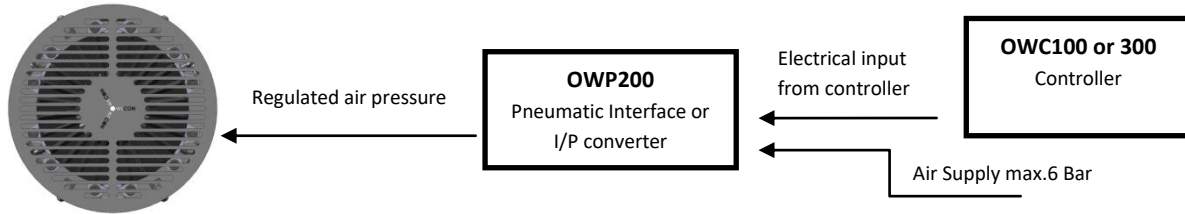
BEST PERFORMING BRAKE SYSTEM SO FAR

- ✓ High performance, excellent heat dissipation
- ✓ Compact industrial design - small dimensions, large application range
- ✓ Flexible torque configuration, range up to 1.500 Nm
- ✓ Easy to integrate, designed to fit modern machine environment
- ✓ Designed for integration with safety chucks or directly on machine frame
- ✓ Cost / Performance effective – “as little as possible, as much as necessary”
- ✓ Produced and supported by OWECON – unmatched customer service and quality

Design specifications



Dimensions mm										
Type	D1	D2	D3	D4	L1	L2	L3	L4	M-	R1
OWB250P	Max. 40	254	303	307	113	60	125	166	M16	138
OWB300P	Max. 50	304	350	357	113	47	125	166	M20	158
OWB350P	Max. 65	350	394	403	119	47	131	172	M20	182



Applications:

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

Electrical specifications:

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

Lining coefficient:

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

Brake Torque and Heat specifications:

OWB 250P	Modules									
Braking torque at 6 Bar	1	2	3	4	5	6				
Standard coefficient 0.45	94	188	282	376	470	564				
Low coefficient 0.2	42	84	126	168	210	252				

Heat dissipation capacity in KW

At RPM =	0	100	200	300	400	500	1000	1500	2000	2500	3000	3500	4000
Heat diss. (kW)	0,4	0,7	1,0	1,5	1,6	1,8	3,0	4,1	5,0	5,8	6,5	7,0	7,5
Heat diss. with Fan (kW)	2,3	2,4	2,5	2,6	2,7	2,8	3,3	4,3	5,1	5,8	6,5	7,0	7,5
Max RPM = 4000	Weight of rotating parts = 10 kg / Max. total weight = 19 Kg.												

OWB 300P	Modules								
Braking torque at 6 Bar	1	2	3	4	5	6	7	8	
Standard coefficient 0.45	124	248	372	496	620	744	868	992	
Low coefficient 0.2	55	110	165	220	275	330	385	440	

Heat dissipation capacity in KW

At RPM =	0	100	200	300	400	500	1000	1500	2000	2500	3000	3500
Heat diss. (kW)	1,0	1,4	1,7	2,0	2,3	2,6	4,1	5,5	6,8	8,0	9,0	10,0
Heat diss. with Fan (kW)	3,1	3,2	3,3	3,4	3,5	3,6	4,5	5,8	6,9	8,0	9,0	10,0
Max RPM = 3500	Weight of rotating parts = 14 Kg / Max. total weight = 29 Kg.											

OWB 350P	Modules									
Braking torque at 6 Bar	1	2	3	4	5	6	7	8	9	10
Standard coefficient 0.45	150	300	450	600	750	900	1050	1200	1350	1500
Low coefficient 0.2	67	134	201	268	335	402	469	536	603	670

Heat dissipation capacity KW

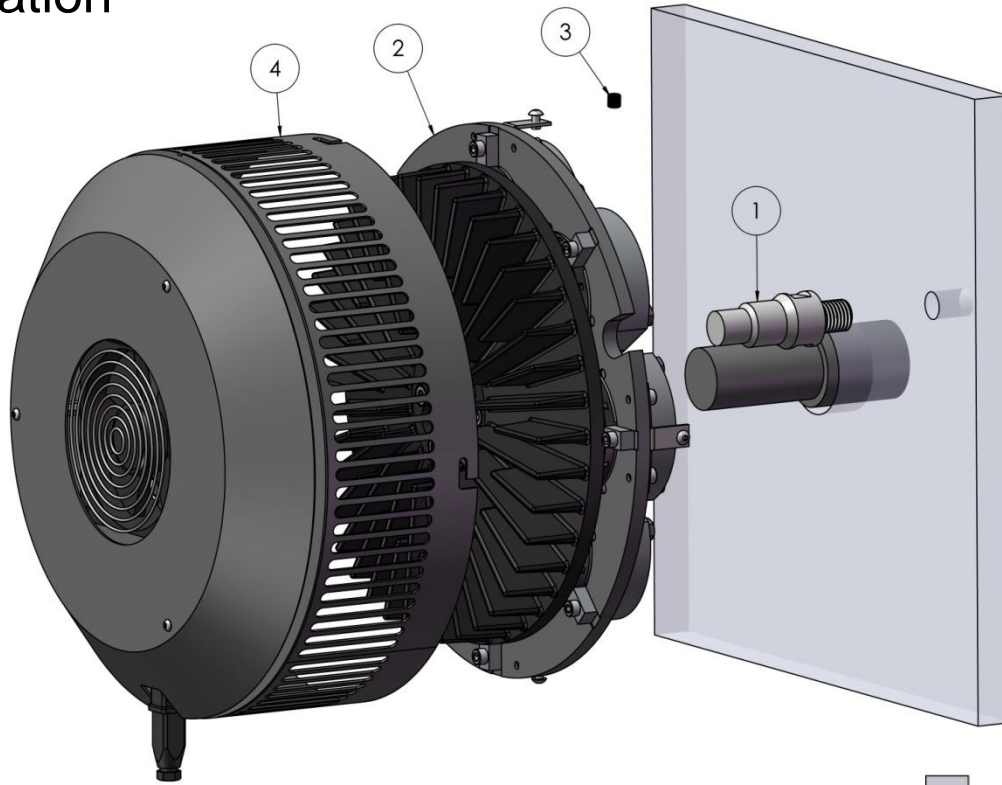
At RPM =	0	100	200	300	400	500	1000	1500	2000	2500	3000
Heat diss. (kW)	1,5	2,0	2,5	2,9	3,3	3,7	5,8	7,7	9,5	11,2	12,7
Heat diss. with Fan (kW)	4,6	4,7	4,8	4,9	5,0	5,1	6,4	8,2	9,7	11,2	12,7
Max RPM = 3000	Weight of rotating parts = 22 Kg / Max. total weight = 46 Kg.										

Heat dissipation

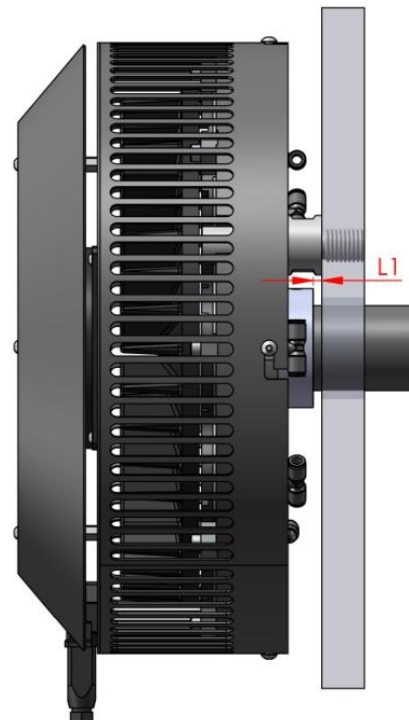
The value of heat dissipation power has been obtained under the following test conditions:

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

Installation



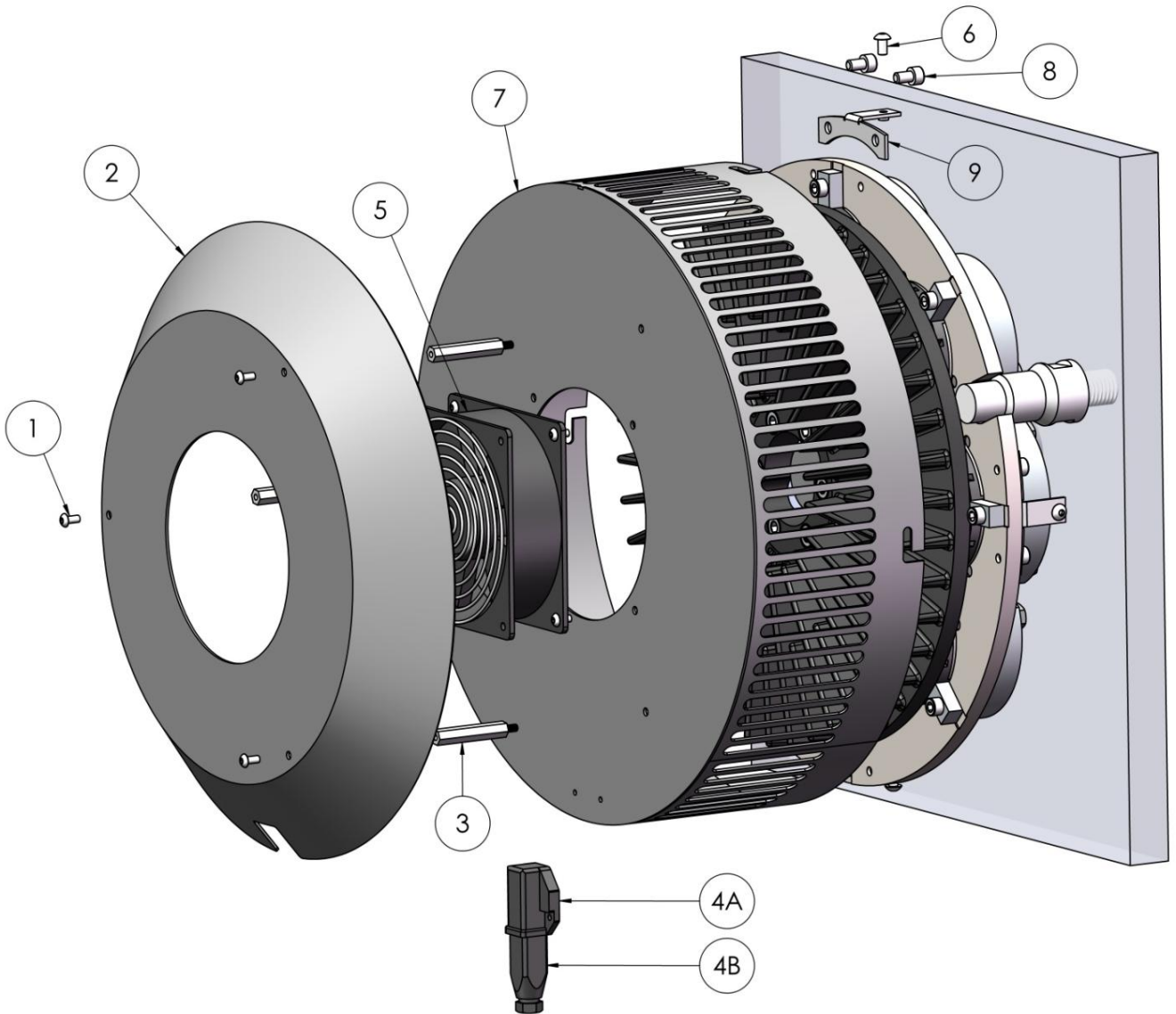
Pos.	Text	Qty
1	Anti rotation bolt	1
2	Spider, module and disc assembly	1
3	Set screw for hub	2
4	Cover	1



	Bolt	BCD = D1	Set Screw	L1
OWB250P	M16	276 mm	M6	5 mm
OWB300P	M20	316 mm	M8	5 mm
OWB350P	M20	364 mm	M8	5 mm

Cover and fan

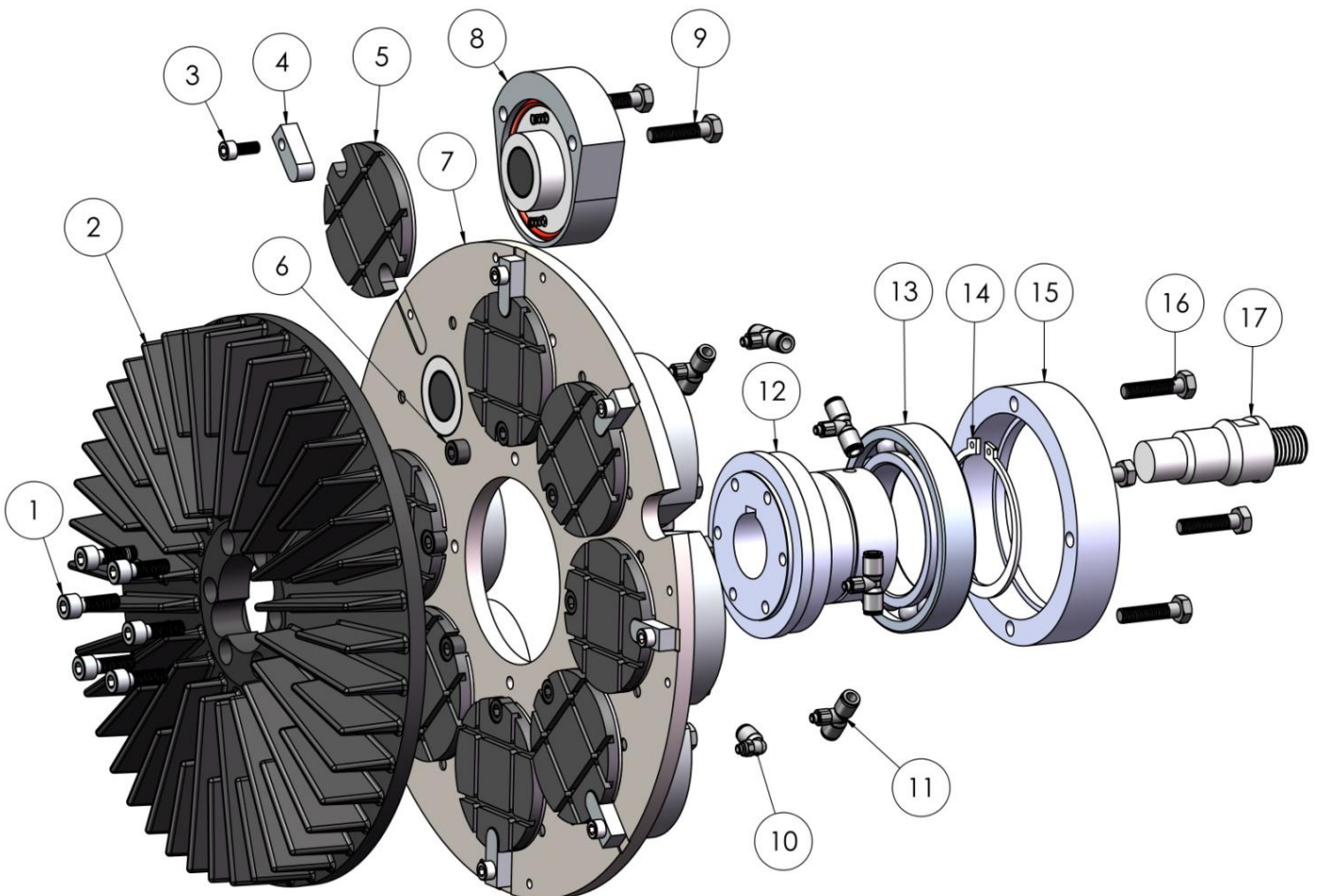
Pos.	Text	Qty	OWB250P	OWB300P	OWB350P
1	Screw for side cover M4	3	Standard	Standard	Standard
2	Side cover	1	90006143	90006149	90006151
3	Spacer for side cover	3	90010054	90010054	90010054
4A	Power connecter fan base	1	90080059	90080059	90080059
4B	Power connecter fan cable	1	90080058	90080058	90080058
5	Cooling fan	1	On request	On request	On request
6	Screw for inner cover M5	4	Standard	Standard	Standard
7	Inner cover	1	90006133	90006148	90006150
8	Screw for bracket M6x10	8	Standard	Standard	Standard
9	Bracket for inner cover	4	90006142	90006142	90006142



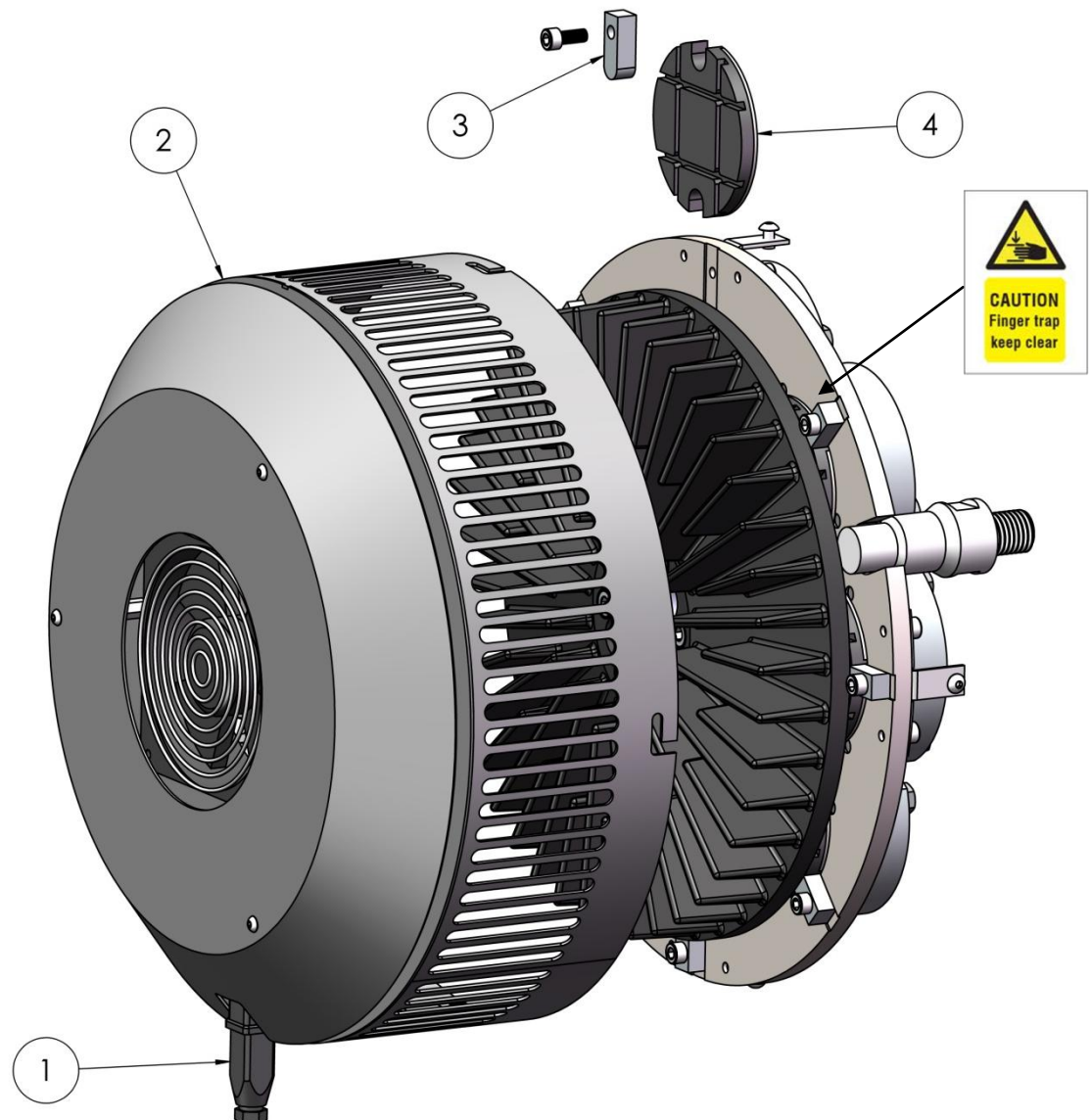
Brake assembly

Pos.	Text	Qty	OWB250P	OWB300P	OWB350P
1	Bolt for brake disc	6	M6x25	M8x25	M10x35
2	Brake disc	1	90006726	90006731	90006736
3	Bolt M6	1*	M6x16	M6x16	M6x16
4	Anti rotation fixture	1*	90006102	90006102	90006102
5	Friction pad	1*	On request	On request	On request
6	Bolt M8	1*	M8x10	M8x10	M8x10
7	Spider plate	1	90006118	90006220	90006182
8	Friction Module	1 to 10	64000101	64000101	64000101
9	Bolt M8x35	2*	Standard	Standard	Standard
10	L-Fitting M5 Ø6	1	90050012	90050012	90050012
11	T-Fitting M5 Ø6	0-9	90050003	90050003	90050003
12	Hub for brake disc	1	On request	On request	On request
13	Bearing	1	6013	6014	6018
14	Bearing housing	1	90006117	90006109	90006184
16	Bolt for bearing housing	4	M8x25	M8x35	M8x40
17	Anti rotation bolt	1	90006159	90006157	90006157

* For each friction module



Friction pad replacement



1. Disconnect power connector 4B for cooling fan
2. Remove cover assembly.



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

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

Friction module

Pos	Text	Qty	
1	Magnet	1	90090001
2	Piston assembly screw	1	M6x12
3	Piston spring	2	90140003
4	Magnet piston part	1	90006106
5	Rolling diaphragm piston part	1	90006108
6	Rolling diaphragm	1	90006015
7	Rolling diaphragm fixation disc	1	90006107
8	Cylinder housing	1	90006110

