

Fact Sheet

Airflex® DPA Caliper Brake

Safe, reliable solution for high torque, high energy braking applications



Committed to your **safety,** and **convenience.**

The Airflex® DPA brake features a symmetrical opposed piston caliper design that is well suited for high torque, high energy stopping applications. Engineered for hydraulic actuation, the DPA brake's robust design is able to withstand the tough operating conditions associated with industrial applications. Additionally, it boasts a long lining life, making it a cost-effective and reliable choice for top drive brakes, conveyors, parking brakes and more.

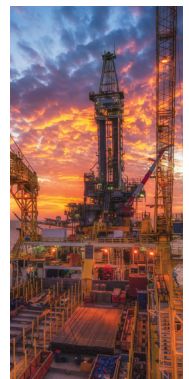
Why the Airflex® DPA Caliper Brakes

- High quality
- High performance
- Low cost of ownership
- Low maintenance
- Long lining life



Features

- A large piston area and 2,000 psi operating pressure range provides for high applied force resulting in maximized torque availability
- Base or split mounting for flexibility and accommodation of different disc thicknesses or diameters to meet diverse customer requirements
- Guide pins transmit torque from friction shoes which prevents piston seal leakage that could result from misalignment between the friction shoe and disc
- Large friction area for long life and reduced maintenance due to friction material wear



Applications

- Top Drive brakes
- Conveyors
- Flywheel brakes
- Inertia brakes
- Parking brakes
- Rotary brakes
- Tension brakes
- Wind Turbine brakes

Airflex® DPA Caliper Brake

Technical Details

ENGINEERING
TOMORROW



Specifications

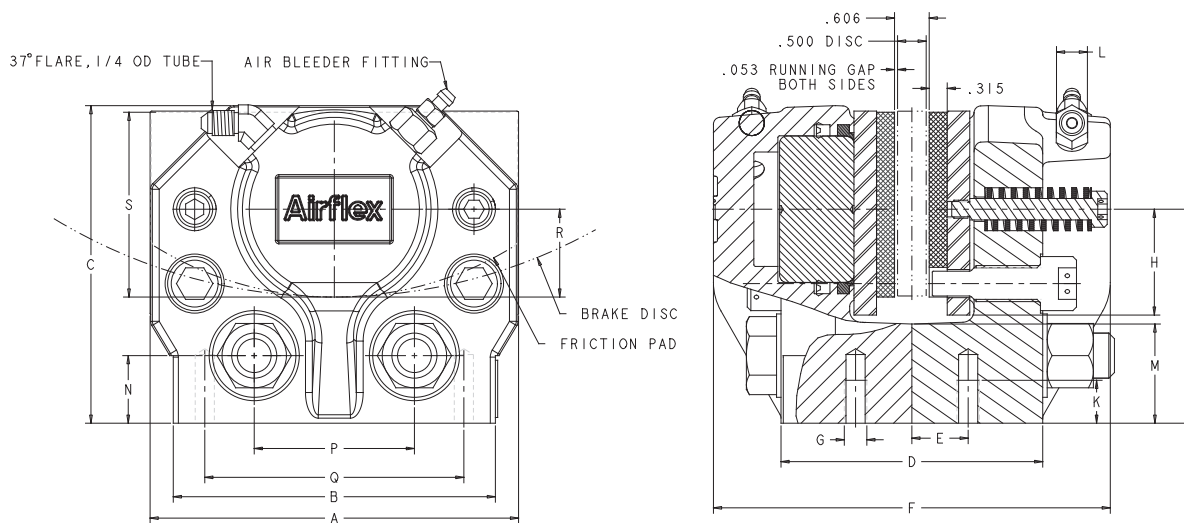
200DPA

Parameter	English Units	SI Units
Dynamic frictional Force Fr		
Standard linings @ 2000 psi	5700 lb	25354 N
Static Friction Force		
Standard linings @ 2000 psi	6300 lb	28023 N
Parasitic Loss Pp	35 psi	3 bar
Disc Constants		
Cd	7.73	196.3
Ct	2.76	70.1
Minimum Disc Diameter	12 in	305 mm
Friction Area	23.3 in ²	150 cm ²
Typical Disc Running Clearance per Side	.053 in	1.35 mm
Cylinder Volume - Engaged		
New lining and disc	.324 in ³	0.01 dm ³
Worn lining and disc	1.637 in ³	0.03 dm ³
Lining Thickness		
New	.315 in	8 mm
Worn	.100 in	2.5 mm
Weight/Mass	23 lb	10 kg

250DPA

English Units	SI Units
Dynamic frictional Force Fr	
9700 lb	43165 N
Static Friction Force	
10600 lb	47170 N
70 psi	4.8 bar
Disc Constants	
9.89	251.2
3.15	80.0
12 in	330 mm
37.5 in ²	242 cm ²
.053 in	1.35 mm
Cylinder Volume - Engaged	
.55 in ³	0.02 dm ³
2.77 in ³	0.05 dm ³
Lining Thickness	
.315 in	8 mm
.100 in	2.5 mm
40 lb	18 kg

Dimensions



Size	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S
English - Dimensions in inches																	
200DPA	5.14	4.56	4.69	4.17	0.98	5.82	4XM12	1.37	3.15	0.75	NPT 1/8	1.58	1.10	2.30	3.62	1.15	2.51
250DPA	6.42	5.63	5.55	4.57	0.98	6.94	6XM12	1.85	3.74	0.75	NPT 1/4	1.73	1.10	2.80	4.53	1.54	3.25
SI - Dimensions in millimeters																	
200DPA	131	116	119	106	25	148	4XM12	35	80	19	NPT 1/8	40	28	58	92	29	64
250DPA	163	143	141	116	25	176	6XM12	47	95	19	NPT 1/4	44	28	71	115	39	83



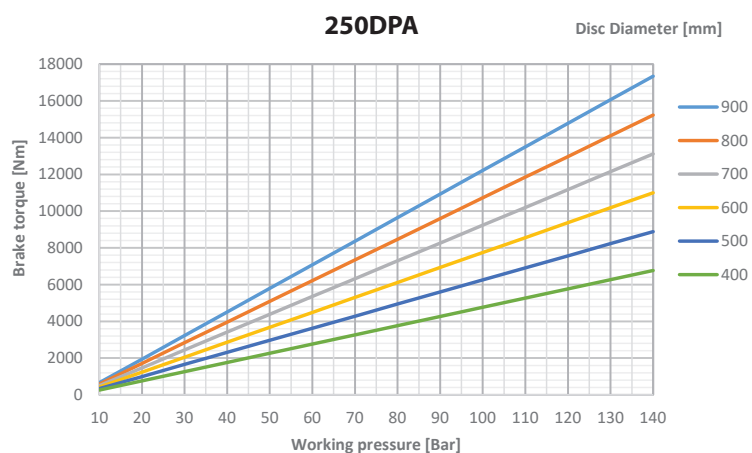
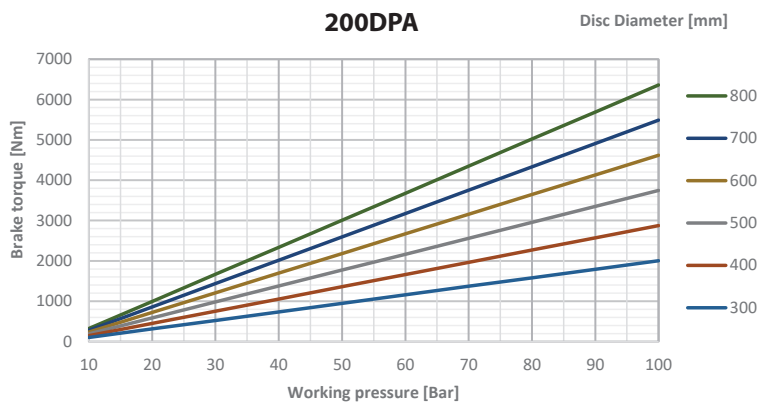
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Danfoss

Torques



VICKERS
by Danfoss