

PASCAL[®] **CLUTCH BRAKE** MODEL **PCA**

Pneumatic Actuated Combination
Clutch Brake



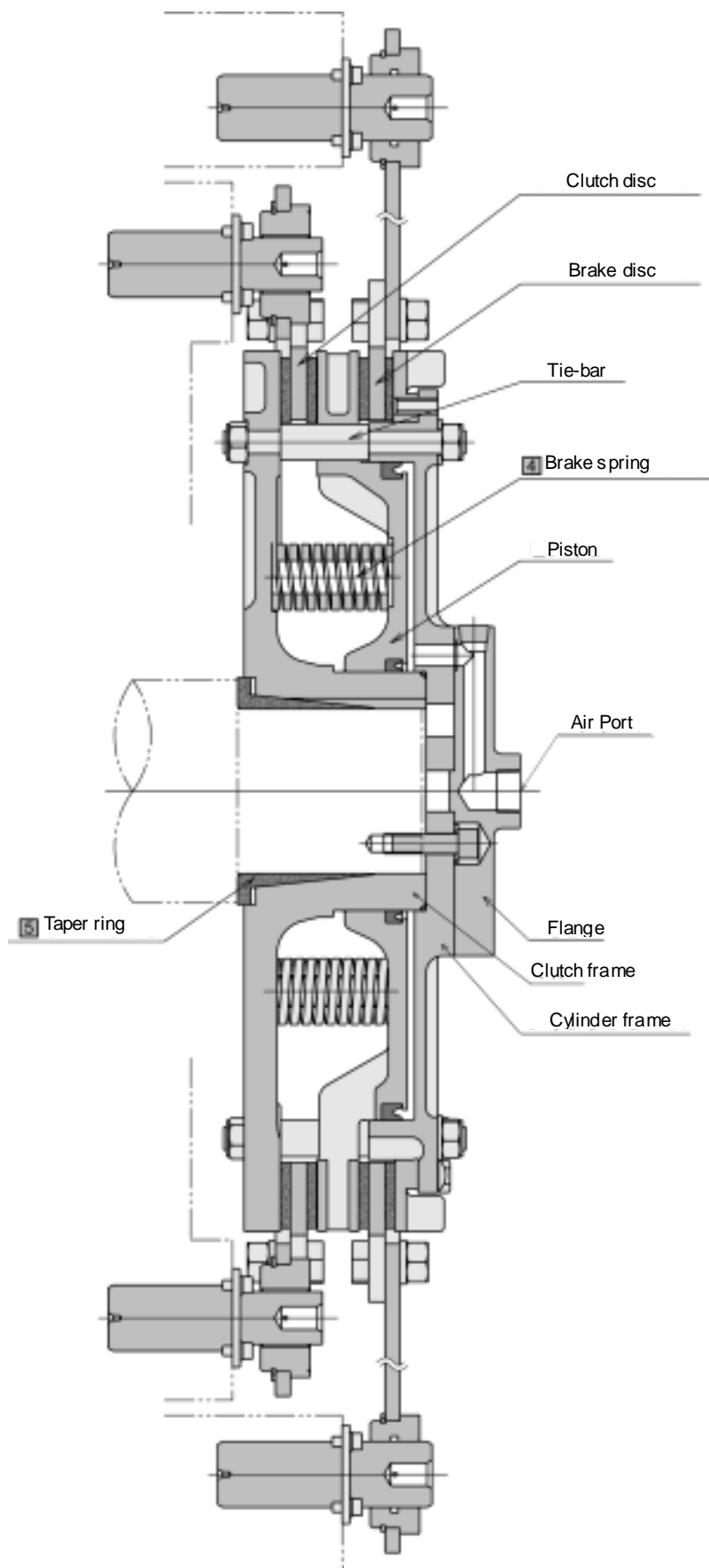
Pascal
Corporation

www.pascaleng.co.jp

PASCAL[®] CLUTCH BRAKE



Clutch torque : 894 ~ 9587N·m
 Brake torque : 710 ~ 3340N·m



Pneumatic Actuated Combination

Reliable High performance Clutch Brake

- Minimized moment (GD^2)
- Largest available torque
- Prominent durability
- High intermittent operation

1 Having smaller deflection on body and cylinder frame has below effects.

- Pressure on lining faces become equalized, thus stable torque character can be obtained.
- Partial/inconstant friction on lining surfaces can be restrained, instead friction will become even on the surface.
- Cylinder stroke became shorter for faster response.
- Performance improvement for frequent intermittent operation and high impact.
- Light weight clutch frame and cylinder frame.

Positive traits for ideal clutch brake are achieved.

2 Cooler fins are specially designed for very high radiation efficiency at long-running operation as well as at frequent intermittent operation.

3 Adopting of ductile iron FCD600 with very limited impurities has brought high durability.

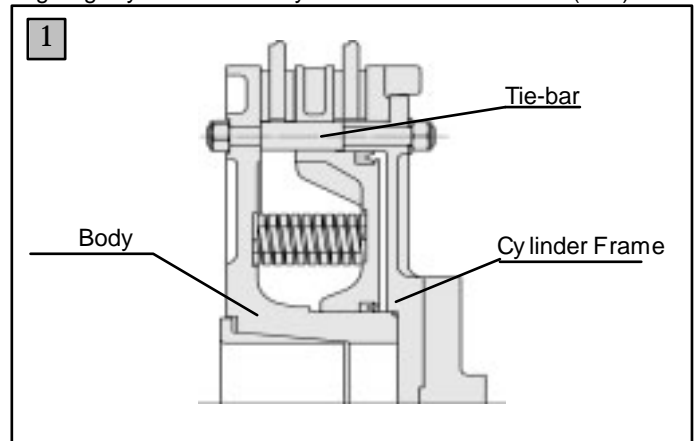
4 High precision springs with low spring constant are adopted in order to follow the worn thickness of linings.

5 Standardized taper ring assures joint strength between the clutch brake and the shaft.

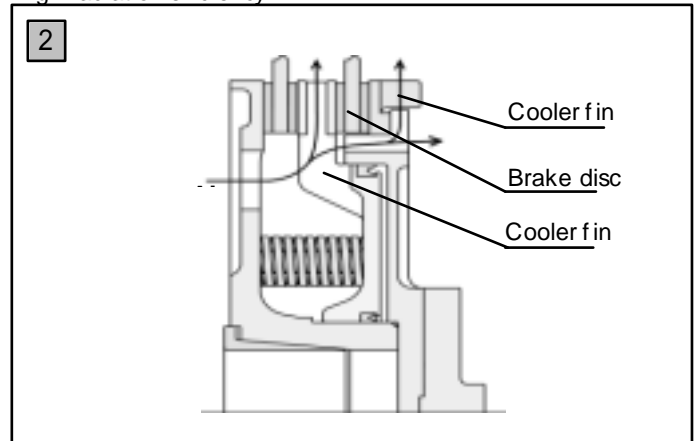
6 Latest CNC turning center which does turning & milling at on chucking gives a prominent machining accuracy, supporting a quality and durability.

7 There are 4 models in PCA series for a variety of clutch brake torque setting you need.

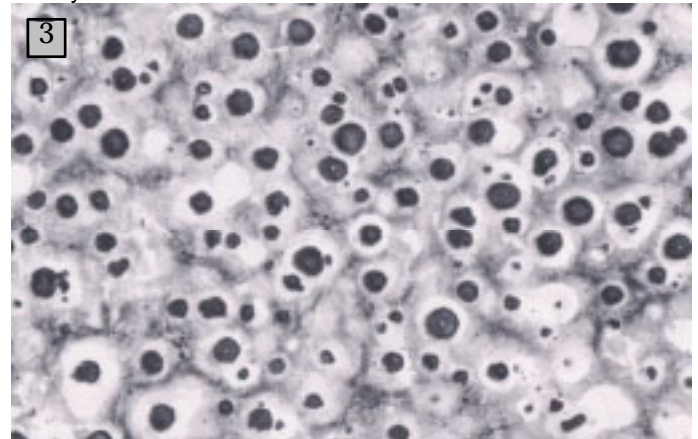
High rigidity frame with very small moment of inertia (GD^2)



High radiation efficiency



Strictly selected material



(X100)

High precision machining

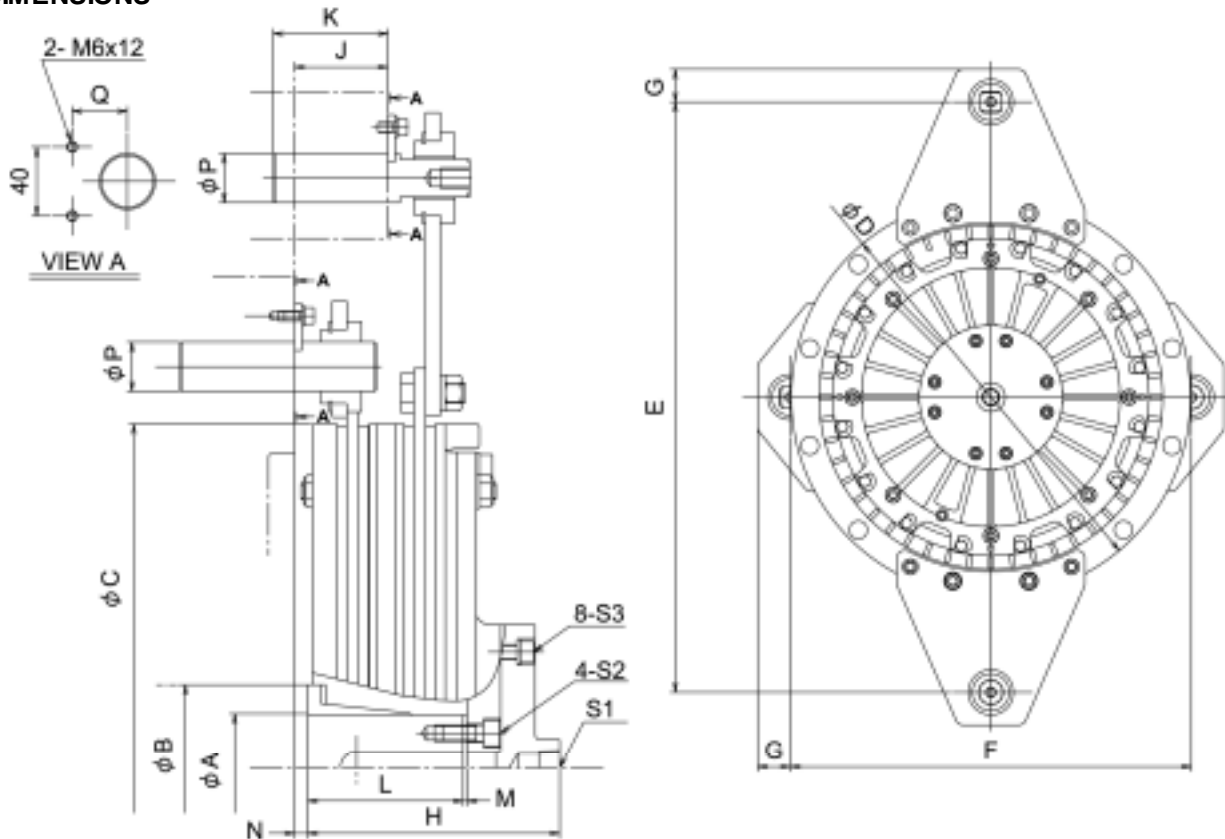


MODEL & SPECIFICATIONS

Model		PCA 24	PCA 32	PCA 36	PCA 40
Clutch torque (N·m)	Air pressure 0.35 MPa	894	2097	3000	4175
	0.40 MPa	1125	2631	3776	5275
	0.45 MPa	1375	3165	4550	6340
	0.50 MPa	1590	3700	5324	7422
	0.55 MPa	1820	4233	6097	8505
	0.60 MPa	2053	4767	6871	9587
Brake torque (N·m)		710	1610	2370	3340
Inertia(J) (kg·m ²)		0.342	0.835	1.590	2.540
GD ² (kgf·m ²)		1.37	3.34	6.40	10.20
Cylinder capacity (dm ³)	At new lining	0.15	0.26	0.35	0.49
	At worn lining	0.30	0.52	0.70	0.98
Max. speed (rpm)		1680	1350	1180	1050
Weight (kg)		43.5	63	96	114

: Figures are of initial at shipment time. Torque reduction at maximum lining wear is 10% for clutch & 15% for brake.

DIMENSIONS



TABLE

Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	S1	S2	S3
PCA24	50 / 65	70 / 92	338	408	630	410	37.5	146.0	51.5	70.0	91	2.0	10	30	32	Rc1/2	M10x25	M 8x25
PCA32	65 / 80	92 / 105	420	488	720	490	40.0	154.0	55.0	70.0	95	2.5	7	30	32	Rc1/2	M12x30	M 8x25
PCA36	80 / 90	105 / 117	480	567	830	580	47.5	163.0	63.5	75.5	104	2.5	8	40	40	Rc3/4	M16x45	M10x25
PCA40	90 / 100	117 / 135	535	626	830	640	47.5	171.5	64.5	75.5	112	2.5	2	40	40	Rc3/4	M16x45	M10x25

mm

Specifications can be changed without notice.

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PASCAL CORP.

HEAD OFFICE

10 Konoike-kaidoushita, Itami,
Hyogo 664-8502 Japan
Tel. 81-72-777-3333 Fax 81-72-777-3520