



# MISTRAL II PNEUMATIC BRAKES

**Wichita Clutch,** leading multinational designer and manufacturer of innovative power transmission products, have developed the Mistral II series of pneumatic tension brakes to meet the needs of the global paper converting industry. Building on the success of the original Mistral design widely used in corrugating, foil and film processing, and paper converting lines, the new range addresses market demand for an updated brake without compromising the industry-leading performance of the legacy model.

Extensively tested in-house, the Mistral II has been benchmarked against products from competing brands and meets or exceeds all performance criteria. The result is a compact, high-performance and versatile product capable of fulfilling tensioning needs of the latest machine designs.

## **FFATURES**

#### **Design**

Mistral II is compact at 295 mm diameter, facilitating the pick-up of small or part-reels used in short batch runs. The new, vented housing is semi-gloss black powder coated for durability and aesthetics. Internally, an integrated high-performance, low energy cooling fan enables high heat dissipation to support increased productivity. Removing just three cap screws provides access to the internal parts. Fine tuning of torque capacity is achieved with a variable number of actuators for optimum tension control.

# Mistral II

#### **Mounting**

Three bolts mount the brake to the arm of the mill roll stand or machine frame and a pilot location simplifies new build and retrofit installations.

#### **Safety**

Mistral II retains the integral guard of the original, eliminating the costs associated with providing additional guarding.



#### **Integrated Cooling**

A high performance, low energy cooling fan is housed within the brake to provide high heat dissipation - a must for higher productivity through controlled tension at high web speeds.

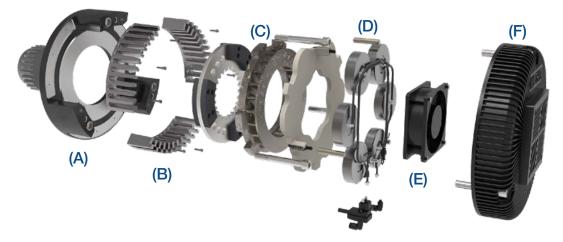
### **Fine Tuning**

The brake may be fitted with a variable number of actuators, allowing precise selection of brake torque capacity for optimum tension control.



#### **Front Cover Fixing**

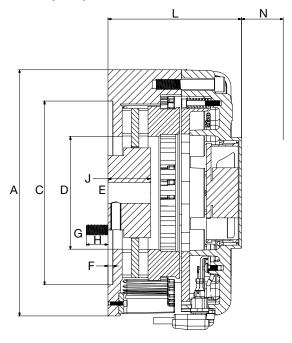
By removing just three cap screws, the front cover can be removed, allowing easy and fast access to the internal parts, which will also automatically disconnect the air and electricity supply.

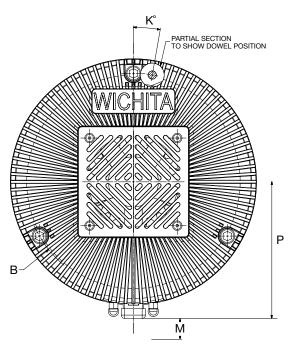


Exploded view of the Mistral II, showing major components (A) ring and backplate, (B) heat sinks, (C) floating plate, (D) actuator assembly, (E) Fan and (F) cover

# **Dimensions (mm)**







E – maximum permissible shaft dia.

M – space required for plug removal

N – distance required for cover removal

Model	A	В	C	D	E	F	G	Н	J	K	L	М	N	P
200	295	260	220 H7	N/A	60	6	3xM12	26	51	10	160	25	50	163

	Model	Fan Voltages	Fan Power	Electric	Pneumatic	
		220 VAC	16 W			
	200	110 VAC	TO VV	Standard IEC Plug	6 mm OD push-fit tube	
	24 VDC	13.2 W		,		

Actuator/Inlet	'AA'	'BB'
200/2	2	0
200/4	2	2
200/6	2	4

# **Performance**

Madel	Dynamic Slipping Torque Capacity			Heat Transfer Capacity			Max	Inertia of	Weight	
Model							Speed	Rotating Parts	Total Brake	Rotating Parts
	Standard Friction Material		No Fan	W	ith Fan					
	0.2 bar	5.5 bar	6 bar		Cont.	30 Min On/Off				
	Nm	Nm	Nm	kW	kW	kW	rpm	kgm²	kg	kg
200/2	7	198	216						21.3	
200/4	14	396	432	1.1	2.4	2.8	2860	0.01	21.8	3.5
200/6	22	594	648						22.2	

The Mistral II is highly linear in its response: The dynamic braking torque is directly proportional to the incoming air supply pressure and the quantity of actuators employed.

#### Wichita Clutch Facilities

#### **North America**

2800 Fisher Road Wichita Falls, TX 76302 - USA 940-723-3400

Pneumatic Clutches and Brakes

#### Europe

**United Kingdom** 

Ampthill Road Bedford MK42 9RD - England +44 (0) 1234 350311

Pneumatic Clutches and Brakes

#### **Asia Pacific**

Australia

+61 2 9894 0133

China

+86 21 5169-9255

Hong Kong +852 2615 9313

**Singapore** 

+65 6487 4464

Taiwan

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