CLEVELAND-KIDDER®

Operating Principle

Magnetic powder resides in an air gap between two concentric rotors. A load is connected to the inner rotor. The powder in the gap becomes magnetized when a DC current is applied to outer rotor coil and transmits resistant torque to the inner rotor. The torque is proportional to the magnitude of the supplied current. This current is adjusted and controlled by a current regulated DC power supply.

Model Number	Nominal	Nominal	Nominal	Nominal
	Rated	Heat	Rated	Weight
	Torque	Dissipation	DC	_
	(ft. lb)	(Watts)	Current	
			(Amps)	
EMAG 1	1.5	40	.40	1.8
EMAG 1H	1.5	60	.40	2.0
EMAG 4	4	65	.50	3.8
EMAG 4H	4	100	.50	4.4
EMAG 9	9	65	.55	5.7
EMAG 9H	9	130	.55	9.7
EMAG 9HB	9	650	.55	9.7
EMAG 26	26	100	1.0	9.9
EMAG 26H	26	200	1.0	14.8
EMAG 26HB	26	1000	1.0	14.8
EMAG 50	50	125	1.0	15.9
EMAG 50H	50	250	1.0	24.2
EMAG 50HB	50	1300	1.0	24.2
EMAG 90	90	275	1.1	37.5
EMAG 90H	90	550	1.1	55.1
EMAG 90HB	90	1900	1.1	55.1
EMAG 150	150	400	1.55	52.9
EMAG 150H	150	750	1.55	66.2
EMAG 150HB	150	2000	1.55	66.2
EMAG 260	260	260	1.50	
EMAG 260H	260	900	1.50	

EMAG PB-2	DIN Rail Mount Current Regulator for EMAG		
	Brakes. 2Amp. Max Current, Accepts set		
	point via potentiometer or 0 to 10 VDC Input.		

Notes:

H- Designates addition of heat sink for improved heat dissipation. HB- Designates addition of both heat sink and blower for improved heat dissipation.

Blower is 115VAC.

EMAG Magnetic Particle Brakes



Performance Benefits Over Pneumatic Brakes

Better torque control – Torque is proportional to the supplied current.

Wider torque range - 100 to 1 torque range.

Wider Speed Range – Torque is independent of rotational speed.

Lower Power Consumption – Recommended Power Supply rated at 2 amps.Max. at 24 VDC. Typical current of 1 amp. or less required.

Noiseless- Electromagnetics eliminates the annoying squeal that can occur with friction brake pads.

Dustless- Excellent for use in medical and clean environments. Electomagnetics eliminates the dust create by friction brake pads.

Lower Maintenance - No brake pads to replace. Life time lubrication.

Faster Response Time – Response of electric current is much faster than the movement of compressed air in the pneumatic brake line.