

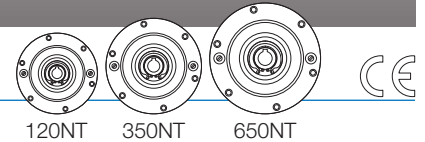
# MP-Series

Magnetic Particle Brakes

*NEW*

MP-B-350-R-T

MP-B-650-N-T



## Montalvo MP-Series Mag Particle Brakes

Smooth, repeatable, high quality performance with no dust. Ideal for low torque applications (up to 575 in-lb/65 Nm) and clean room environments, the MP-Series provides the precise, smooth torque control you require from full roll to core, maximizing your process capabilities.

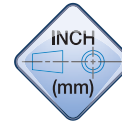
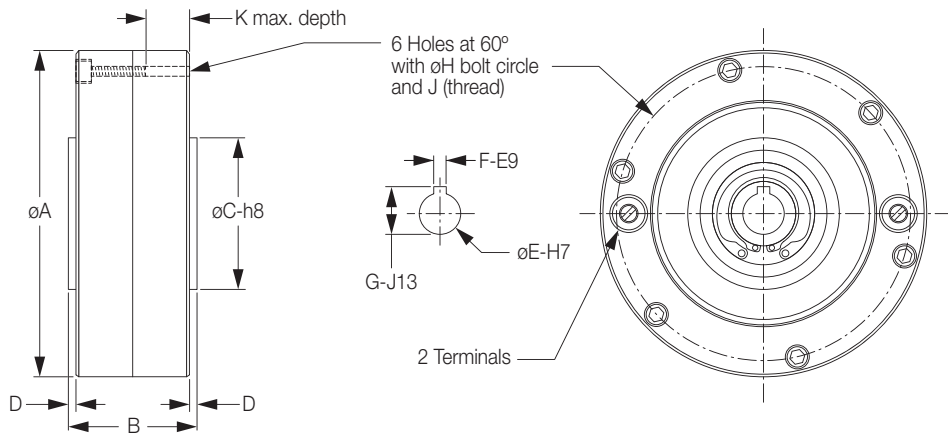
### Features

- ▶ Multiple sizes in broad torque ranges
- ▶ Passive and forced air cooling options
- ▶ Popular Thru-Shaft design fits most applications
- ▶ For use in tension applications requiring:
  - Stop
  - Static Braking
  - High-Frequency
  - Positioning
  - Clean Room / Dust Free



MP-B-650-N-T brake shown with VC2 Voltage Converter

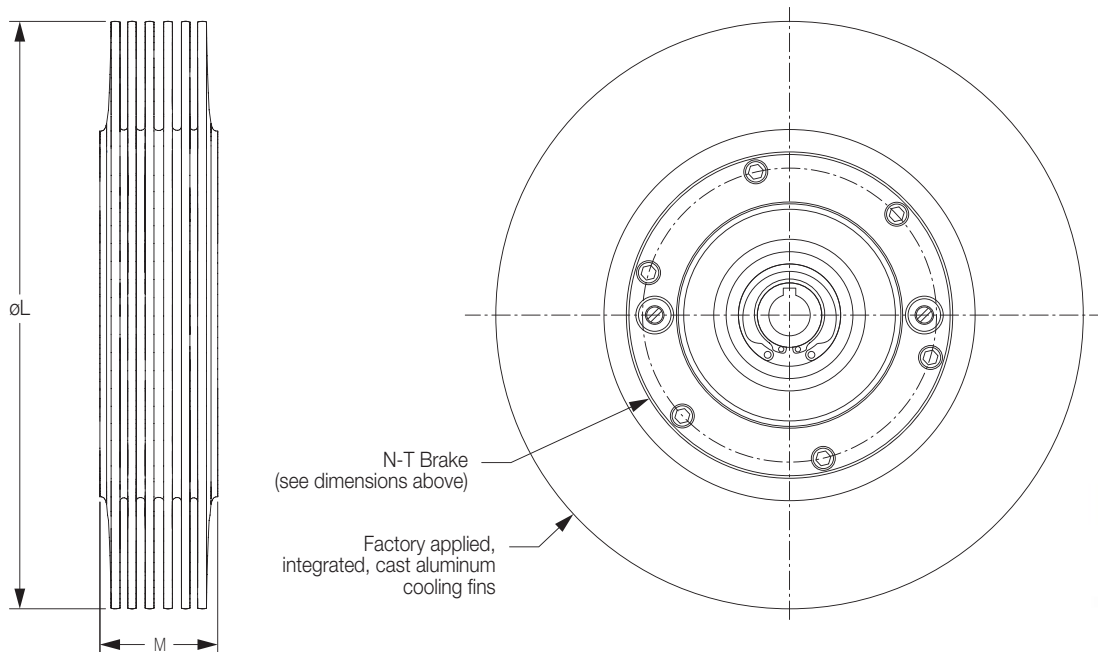
**Dimensions N-T Brake (has no auxillary cooling)**



MP-B-120-N-T brake shown

Brake	øA	B	øC h8	D	øE H7	F E9	G J13	øH	J	K
120-N-T	4.51 (114.5)	1.89 (48)	2.166 (55)	0.14 (3.5)	0.591 (15)	0.158 (4)	0.638 (16.2)	4.06 (103)	M5	0.47 (12)
350-N-T	5.35 (135.5)	2.01 (51)	2.166 (55)	0.06 (1.5)	0.669 (17)	0.197 (5)	0.756 (19.2)	4.80 (122)	M5	0.66 (17)
650-N-T	6.19 (157.25)	2.37(60)	2.953 (75)	1.0 (2.5)	0.788 (20)	0.237 (6)	0.898 (22.8)	5.67 (144)	M6	0.59 (15)

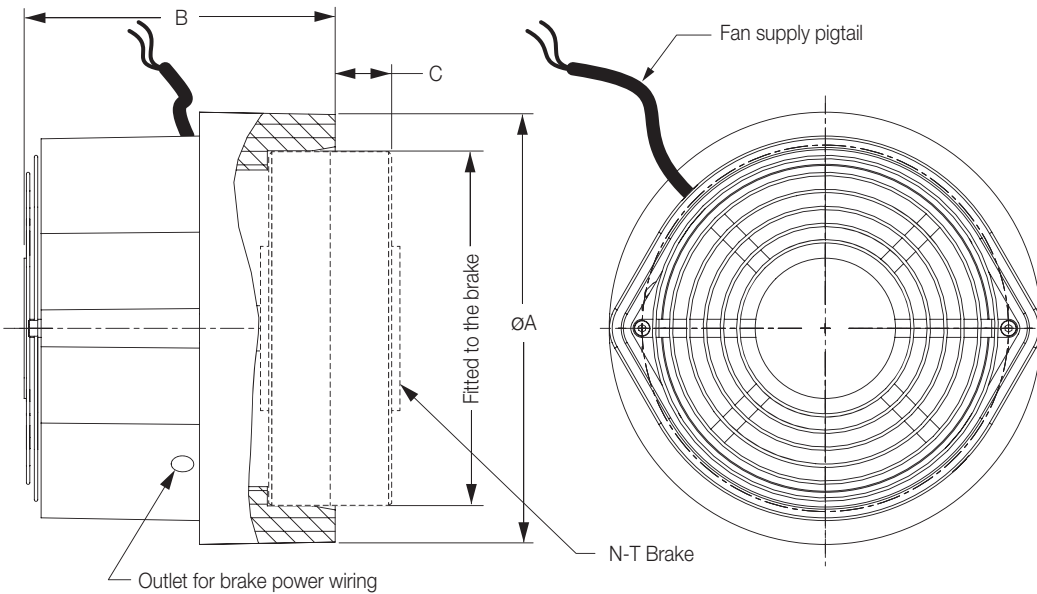
**Dimensions R-T Brake (has auxillary passive cooling)**



MP-B-350-R-T brake shown

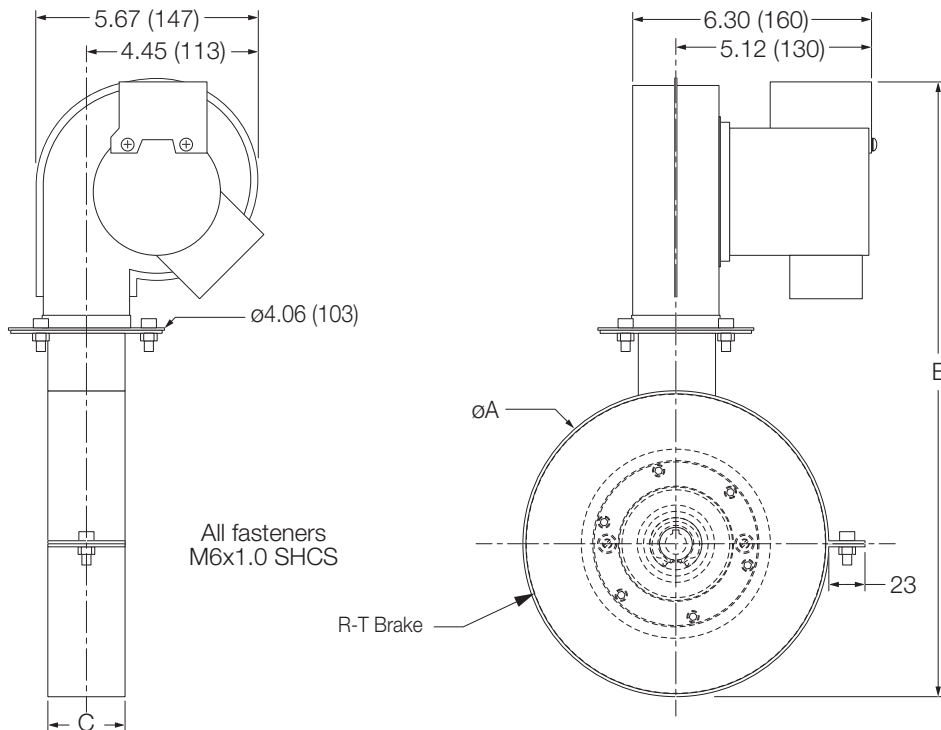
Brake	øL	M
120-R-T	7.80 (198)	1.89 (48)
350-R-T	9.37 (238)	2.05 (52)
650-R-T	10.95 (278)	2.37 (60)

## Dimensions - Auxillary FAN Cooling Option Kit for N-T Brake



Brake	ØA	B	C	Kit Part Number
350-N-T	6.77 (172)	5.51 (140)	0.79 (20)	10008017
650-N-T	7.48 (190)	5.51 (140)	1.10 (28)	10008018

## Dimensions - Auxillary Blower Cooling Kit for R-T Brake



Brake	ØA	B	C	Kit Part Number
120-R-T	7.88 (200)	15.77 (401)	1.74 (44)	10008014
350-R-T	9.45 (240)	17.36 (441)	1.97 (50)	10008015
650-R-T	11.02 (280)	18.94 (481)	2.00 (51)	10008016

# MP-Series

Magnetic Particle Brakes

## Specifications

Item		120	350	650
Rated Torque	in-lb (Nm)	106 (12)	312 (35)	575 (65)
Rated Current	A	0.55	1.00	1.00
Residual Torque	in-lb (Nm)	2.44 (0.27)	2.88 (0.33)	5.52 (0.63)
Residual Torque RR <sup>(1)</sup>	in-lb (Nm)	4.8 (0.56)	5.76 (0.66)	11.16 (1.30)
Coil Resistance <sup>(2)</sup>	Ω	23	19	20
Rotor Inertia	in-lb <sup>2</sup> (kg/m <sup>2</sup> )	0.8525 (0.25.10 <sup>-3</sup> )	2.6939 (0.79.10 <sup>-3</sup> )	7.161 (2.10 <sup>-3</sup> )
Min. Rotation Speed <sup>(3)</sup>	rpm (mn <sup>-1</sup> )	40 (40)	40 (40)	40 (40)
Max. Rotation Speed <sup>(3)</sup>	rpm (mn <sup>-1</sup> )	3000	3000	3000
Rated Outside Body Temp <sup>(4)</sup>	°F (°C)	212 (100)	212 (100)	212 (100)
Max. Outside Body Temp	°F (°C)	248 (120)	248 (120)	248 (120)
Weight N-T	lb (kg)	5.72 (2.60)	9.90 (4.50)	15.8 (7.20)
Weight R-T	lb (kg)	9.68 (4.40)	14.7 (6.70)	24.0 (11.0)
Weight Fan Kit	lb (kg)	NA	3.85 (1.75)	3.85 (1.75)
Weight Blower Kit	lb (kg)	5.6 (2.55)	5.8 (2.67)	6.0 (2.73)

(1) Remnant motor version.

(2) At 68°F (20°C) (varies with the coil temperature).

(3) Except RR versions. Any further request, consult Montalvo.

(4) Max for rated life.

## Max.Heat Dissipation as HP (Watts)

Brake	120	350	650
N-T	0.10 (75)	0.14 (100)	0.20 (150)
R-T	0.20 (150)	0.28 (210)	0.47 (350)
N-T with Fan Kit	NA	0.67 (500)	0.94 (700)
R-T with Blower Kit	0.87 (650)	1.88 (1400)	2.42 (1800)

## Auxillary Cooling Kits

### For N-T Brakes

350 Fan Kit (24VDC 0.5 A max.)	10008017
650 Fan Kit (24VDC 0.5A max.)	10008018

### For R-T Brakes

120 Blower Kit (115VAC 0.45A max.)	10008014
350 Blower Kit (115VAC 0.45A max.)	10008015
650 Blower Kit (115VAC 0.45A max.)	10008016

## Voltage Converter

### For 120 / 350 / 650 Brakes & Clutches

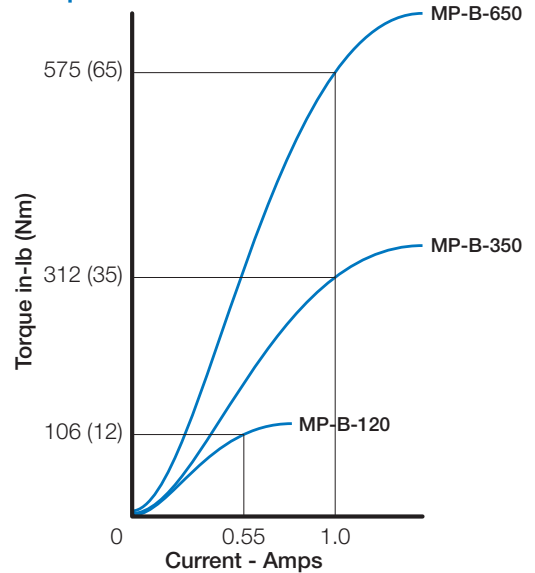
VC2	10008013
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### Part Number

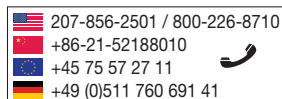
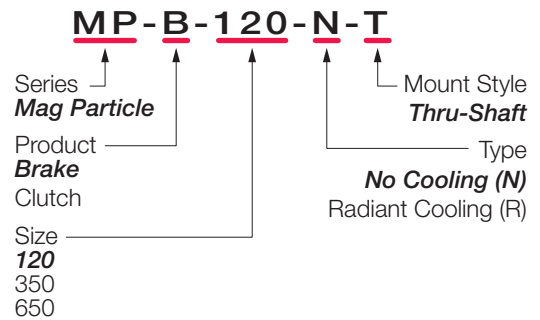
### Part Number

### Part Number

## Torque Curve



## Order Code (example)



The Montalvo Corporation

EST. 1947

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