



# 1EB

## **Series 1EB Spring-Applied Electromagnetically-Released Single-Disc Brakes**

### ***Stationary Field for Dry Operation***



Series 1EB spring-applied electromagnetically-released brakes are designed for dry use. They are engaged by a disc spring and disengaged by a DC voltage. The hub is fitted to the shaft which is being braked.

#### **Typical Applications**

- Servo Motor Brakes
- Forklift Trucks
- Current Generation Sets-to connect gas/diesel engine generator
- PTO Marine Drives-for compressors and generators
- Cutting Machines-to switch the cutter bar
- Steel Manufacture and Machining
- Paper Production-for transmission connection of the machining centers
- Automated Doors

#### **Features**

- Spring-applied ensuring engagement in the event of a power failure
- Design configuration is particularly suitable for external mounting, simplifying retro-fitting to existing machinery
- A location diameter and two sets of standard fixing holes are provided in the end plate
- Only the hub and friction disc rotate, minimizing rotational inertia
- Efficient magnet design reduces power consumption and heat generation

For Technical Assistance Call

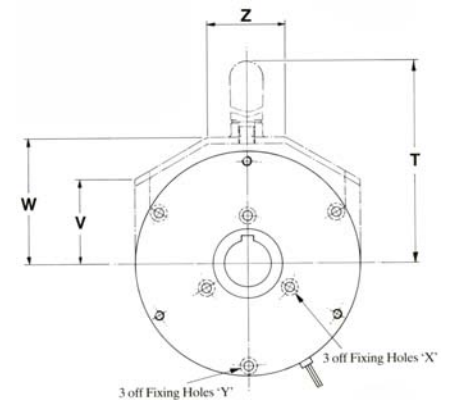
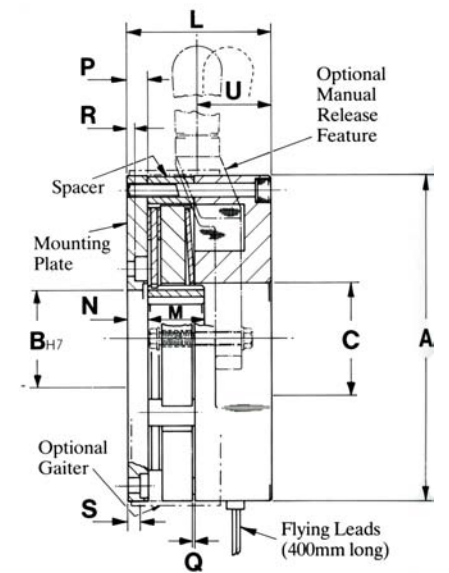
**800-825-9050**

 **Matrix**<sup>®</sup>  
International  
An Altra Industrial Motion Company



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MODEL		1EB50	1EB60	1EB70
<b>Performance Data</b>				
Rated Dynamic Torque	Nm	70	106	230
	ft-lbs	52	78	170
Power Consumption at 20°C	Watts	49	54	67
Maximum Energy per Engagement	kJ	35	56	88
Maximum Energy per Hour	kJ	980	1450	2100
Maximum Speed	revs/min	3000	3000	3000
<b>Weight (kg)</b>				
Complete Unit		9.1	13.2	20.2
<b>Dimensional Data</b> (all dimensions in mm)				
Standard Bores (H7)		35	40	45
Keyways to I.S.O. 773		10 x 3.3	12 x 3.3	14 x 3.8
B.S. 4235:1972 Pt. 1				
D.I.N. 6885:1968 Pt. 1; NF.E22-175		30	35	40
(Bores other than standard can be obtained by special order)		8 x 3.3	10 x 3.3	12 x 3.3
Minimum Bore		29.8	29.8	29.8
<b>Diameters</b> (all dimensions in mm)				
A		160	185	212
B (H7)		55	65	75
C		58	70	80
<b>Lengths</b>				
L		74.5	80.5	94
M		30	30	35
N (Max.)		11	11	11
N (Min.)		3	3	3
P		11	11	11
Q (Air Gap Setting)		0.15	0.25	0.25
<b>Fixing Holes 'X'</b>				
Diameter		8.5	8.5	8.5
Counterbore Diameter		14.5	14.5	14.5
P.C.D.		74	84	100
R		3	3	3
<b>Fixing Holes 'Y'</b>				
Diameter		8.5	8.5	8.5
Counterbore Diameter		14.5	14.5	14.5
P.C.D.		145	170	196
S		8.75	8.75	8.75
<b>Manual Release Feature</b>				
T		302	346	450
U		37	40	49
V		59	68	93
W		90	103	125
Z		50	60	92
Disengaging Force	N	225	243	300



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