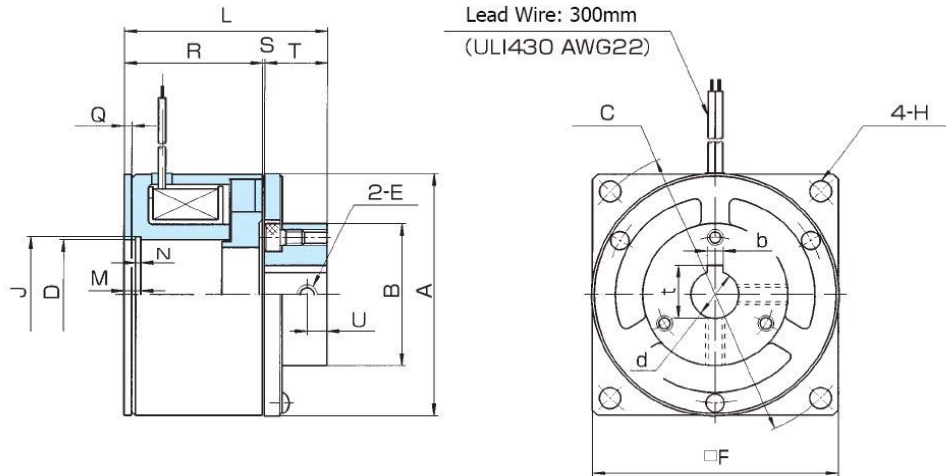


# AMB

## Micro EM Brake

Types: 2.5, 5, 10, 20, 40, 80

[ EM: Electromagnet ]



| AMB   |                    | 2.5                   | 5                     | 10                    | 20                    | 40                    | 80                    |
|---|--------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Static Torque [in-lbs / N-m]                |                    | 2.2 / 0.25            | 4.4 / 0.5             | 8.9 / 1               | 18 / 2                | 35 / 4                | 71 / 8                |
| Coil<br>(20°C)                              | Voltage [DC-V]     | 24                    |                       |                       |                       |                       |                       |
|   | Current [A]        | 0.13                  | 0.17                  | 0.25                  | 0.26                  | 0.38                  | 0.48                  |
|   | Resistance [Ω]     | 192                   | 144                   | 96                    | 94                    | 64                    | 50                    |
|   | Wattage [W]        | 3                     | 4                     | 6                     | 6.1                   | 9                     | 11.5                  |
|   | Time Constant [ms] | 4                     | 7                     | 10                    | 11                    | 19                    | 24                    |
| Armature                                    | Pull-In Time [ms]  | 10                    | 13                    | 17                    | 21                    | 32                    | 37                    |
|   | Release Time [ms]  | 15                    | 20                    | 25                    | 26                    | 40                    | 45                    |
| Torque Build-Up Time [ms]                   |                    | 15                    | 17                    | 27                    | 35                    | 55                    | 60                    |
| Max Allowable Speed [rpm]                   |                    | 3600                  | 3600                  | 3600                  | 3600                  | 3600                  | 3600                  |
| Moment of Inertia (J) [kg-cm <sup>2</sup> ] |                    | 0.035                 | 0.055                 | 0.103                 | 0.193                 | 0.495                 | 1.05                  |
| Max Air Gap Until Adjustment [mm]           |                    | 0.4                   | 0.45                  | 0.55                  | 0.6                   | 0.7                   | 0.7                   |
| Total Energy Until Adjustment [J]           |                    | 2.8 x 10 <sup>6</sup> | 4.5 x 10 <sup>6</sup> | 7.5 x 10 <sup>6</sup> | 1.2 x 10 <sup>7</sup> | 1.8 x 10 <sup>7</sup> | 2.7 x 10 <sup>7</sup> |
| Total Energy Until Life [J]                 |                    | 8.7 x 10 <sup>6</sup> | 1.4 x 10 <sup>7</sup> | 2.3 x 10 <sup>7</sup> | 3.8 x 10 <sup>7</sup> | 5.8 x 10 <sup>7</sup> | 8.5 x 10 <sup>7</sup> |
| Max Work Rate [W]                           |                    | 18                    | 20                    | 26                    | 30                    | 40                    | 55                    |
| Bore [mm]                                   | dH8                | 6                     | 6                     | 8                     | 10                    | 12                    | 15                    |
| Key Way [mm]                                | bE9                | 2                     | 2                     | 2.5                   | 4                     | 4                     | 5                     |
|   | t+0.1/-0           | 6.9                   | 6.9                   | 8.9                   | 11.5                  | 13.5                  | 17                    |
| Dimensions<br>[mm]                          | A                  | 35                    | 40                    | 46                    | 51                    | 61                    | 70                    |
|   | B                  | 22                    | 22                    | 26                    | 31                    | 36                    | 40                    |
|   | C                  | 42                    | 48                    | 56                    | 63                    | 74                    | 84                    |
|   | DH7                | 15                    | 15                    | 22                    | 26                    | 28                    | 32                    |
|   | E                  | M3                    | M3                    | M4                    | M4                    | M5                    | M5                    |
|   | F                  | 35                    | 40.2                  | 46.2                  | 53                    | 61                    | 70.2                  |
|   | H                  | 3.3                   | 3.3                   | 4.5                   | 4.5                   | 5.3                   | 5.3                   |
|   | J                  | 15.7                  | 15.7                  | 23                    | 27.2                  | 29.4                  | 33.7                  |
|   | L                  | 31                    | 31                    | 39.8                  | 44.3                  | 50.5                  | 53.5                  |
|   | M                  | 3.5                   | 3.5                   | 3.5                   | 4.2                   | 4.2                   | 4.2                   |
|   | N                  | 1.15                  | 1.15                  | 1.15                  | 1.35                  | 1.35                  | 1.35                  |
|   | Q                  | 1.4                   | 1.4                   | 1.4                   | 1.4                   | 1.9                   | 1.9                   |
|   | R                  | 21.8                  | 21.8                  | 27.55                 | 30.05                 | 34.5                  | 35.5                  |
| S   | 0.15~0.25          | 0.15~0.25             | 0.2~0.3               | 0.2~0.3               | 0.25~0.35             | 0.25~0.35             |                       |
| T   | 9                  | 9                     | 12                    | 14                    | 15.7                  | 17.7                  |                       |
| U   | 3                  | 3                     | 4                     | 5                     | 5                     | 5                     |                       |
| Weight [lbs / kg]                           |                    | 0.28 / 0.13           | 0.37 / 0.17           | 0.56 / 0.25           | 0.82 / 0.37           | 1.3 / 0.6             | 1.9 / 0.9             |

[ 1" = 25.4mm ]