| 8 | 7 | | 6 |
|---|---------------------------------|-----------|--------------|
| Performance Parameters | Symbol | Unit | AVM100-HF-10 |
| Stroke | S | mm | 10.0 |
| Continuous Force @100°C ^{[1][2]} | F _c | N | 193.6 |
| Peak Force ^[2] | F _{pk} | N | 763.7 |
| Force Constant ±10% ^[2] | K _f | N/A | 55.3 |
| Back EMF Constant ±10% ^[2] | Ke | V/(m/s) | 55.3 |
| Motor Constant @25°C ^[2] | K _m | N/Sqrt(W) | 30.0 |
| Resistance @25°C ±10% ^[3] | R ₂₅ | Ω | 3.40 |
| Inductance ±20% ^[4] | L | mH | 4.43 |
| Electrical Time Constant | Te | ms | 1.30 |
| Continuous Current @100°C ^[1] | lc | А | 3.5 |
| Peak Current | l _{pk} | A | 14.0 |
| Continuous Power Dissipation @100% | C ^[1] P _c | W | 53.7 |
| Max. Coil Temperature | t _{max} | °C | 100 |
| Thermal Dissipation Constant ^[1] | K _{th} | W/ºC | 0.716 |
| Max. Voltage | U _{max} | Vdc | 120 |
| Coil Mass | m _{coil} | g | 1117.0 |
| Core Mass | m _{core} | g | 3300.0 |
| Running Clearance | Lgap | mm | 0.65 |

В

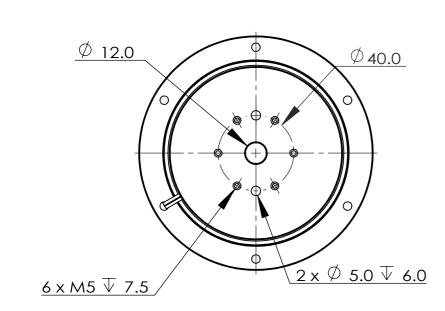
[1] Measurement is taken at ambient temperature 25°C. Value depends on the thermal environment.

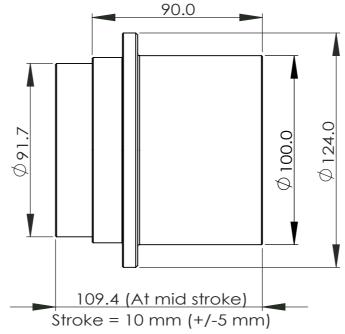
[2] The values are at mid stroke.

[3] Resistance is measured by DC current with 0.5 m lead wire.

[4] Inductance is measured by current frequency of 1 kHz.

The contents of datasheet are subject to change without prior notice.





<u>2 x ∅ 4.0 ∓ 5.0</u>

0

Stroke (mm)

1

<u>6 x ∅ 4.5 THRU</u>

| | | | | Stroke = 10 | mm (+/-5 mm) | | | |
|---|---|---|---|-------------|---|---|--|----------------------------------|
| Α | | | | | AKRIBIS SYSTEMS CONFIDENTIAL: THIS DOCUMENT AND THE INFORMATION CONTAINED IN IT ARE CONFIDENTIAL, AND CANNOT BE COPIED OR DISCLOSED IN WHOLE OR IN PART WITHOUT WRITTEN CONSENT OF | UNLESS OTHERWISE SPECIFIE ALL DIMENSIONS IN mm REMOVE ALL SHARP EDGES GENERAL TOLERANCE X ± 0.25mm X.X ± 0.1mm X.XX ± 0.05mm | Drawn Checked Approved Material | SL SL YH YX NA NA |
| | | | | | AKRIBIS SYS PTE LTD | X.XXX ± 0.025mm | Quantity | NA |
| | 8 | 7 | 6 | 5 | 4 | | 3 | |

70

Force Constant (N/A) 05 05 05 09

20

-5

-4

5

4

AVM100-HF-10

-3

-2

-1

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