



Flexure Bearing Stirling Cooler SF070

The AIM SF070 is a Stirling cryocooler based on latest technology including Moving Magnet design and Flexure Bearing suspension on both ends of driving mechanism. Computerized alignment process combined with an optimized material composition inside the helium vessel results in lifetimes exceeding 20,000h.

The cooler is designed for high performance IR detectors and high temperature superconductor applications. The SF070 is compact, lightweight and provides a cooling capacity of 0.5W @80K, at 71°C ambient temperature.

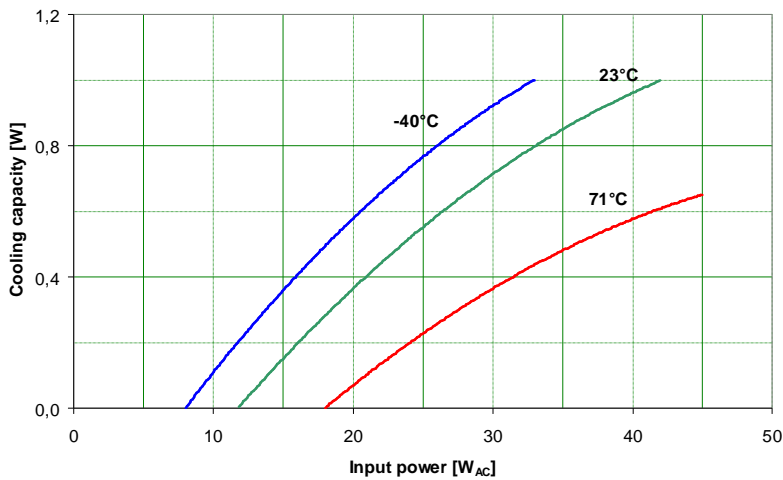
The resulting performance margin allows detector temperatures down to 67K.

The SF070 can be powered by a customer control electronics or by the AIM cooler electronics AM7X.

- **Flexure Bearing and Moving Magnet technology**
- **High MTTF (>20,000h)**
- **Compact and lightweight**
- **High cooling capacity 0.8W (@80K; 23°C)**
- **Sleeve Coldfinger suitable for IDCAs solutions**



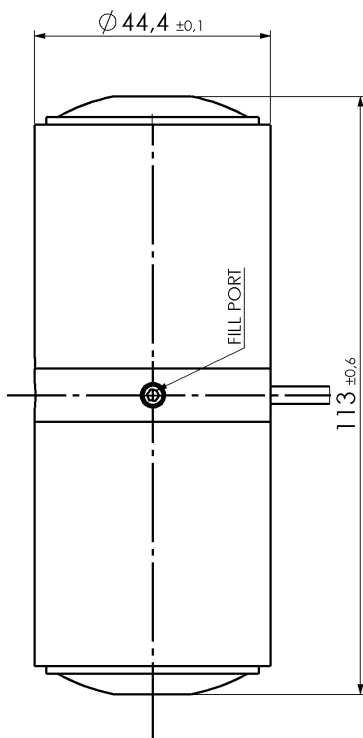
Typical Performance Data
SF070A @80K



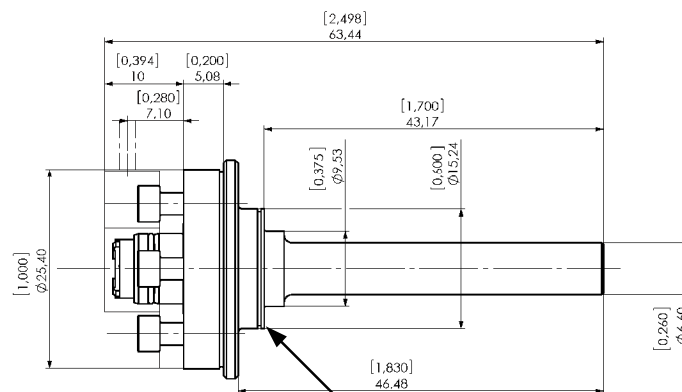
SF070A	
Compressor diameter [mm]	45mm
Compressor length [mm]	< 115
Compressor weight [kg] (without coldfinger)	< 1.0
Supply voltage	5-15 V _{AC}
Cooler controller	ext.
Coldtip outer diameter [mm]	6 (1/4inch) or 8
Max. length of transferline [mm]	150
Ambient temperature range [°C]	- 54 to + 80

Applications

- High performance IDCA and superconductor applications
- IR detectors operated at 67 - 120K (ambient temperature up to 71°C)
- Applications requiring high cryocooler reliability and reduction in maintenance costs



Dimensions SF070A compressor



welding flange for outer dewar can be changed according to customer needs

Dimensions AIM 6mm coldfinger

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