

FLEXURE BEARING STIRLING COOLER SF070

- **Flexure Bearing and Moving Magnet Technology**
- **High MTTF (>25,000h)**
- **Compact and lightweight**
- **High cooling capacity of 0.8W (@ 80K; 23°C)**
- **Sleeve coldfinger, suitable for IDCA solutions**

The AIM SF070 is a Stirling cryocooler based on Moving Magnet technology and Flexure Bearing suspension on both ends of the driving mechanism. A computerized alignment process combined with an optimized material composition inside the helium vessel results in lifetimes exceeding 25,000h.

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

The resulting performance margin allows detector temperatures down to 70K.

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

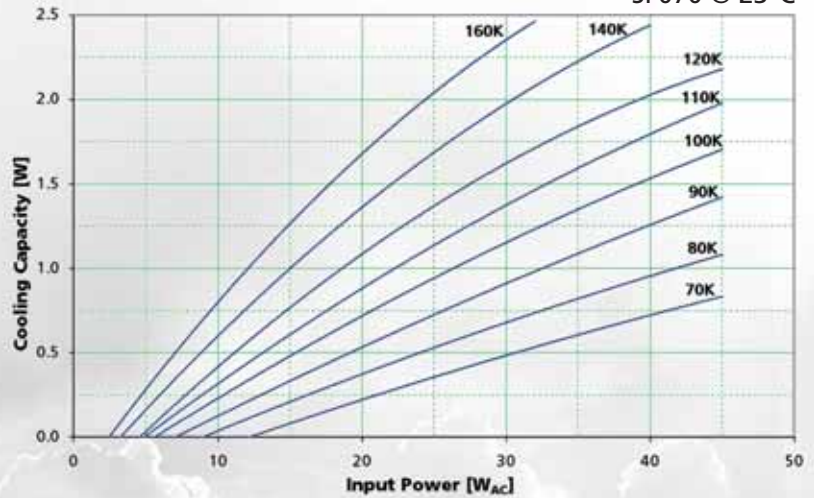


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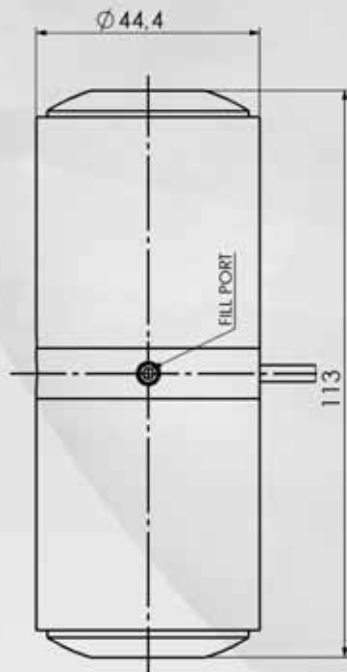
Typical Performance Data
SF070 @ 23°C

Applications

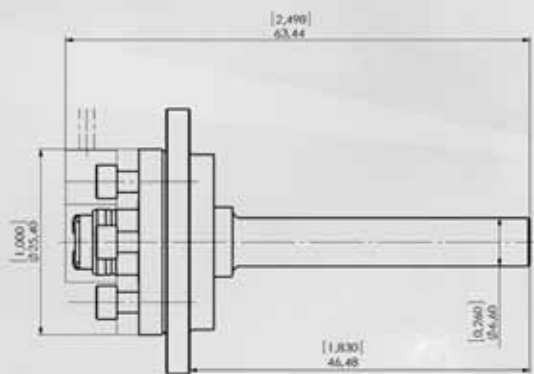
- High performance IDCAs
- IR-detectors operating at 70 - 140K (ambient temperature up to 80°C)
- Applications requiring high cryocooler reliability and reduction in maintenance costs



	SF070A
Compressor diameter [mm]	44
Compressor length [mm]	113
Compressor weight [g] (without coldfinger)	850
Supply voltage	5-15 V _{Ac}
Cooler controller	ext.
Coldtip outer diameter [mm]	6 (1/4") or 8
Ambient temperature range [°C]	-54 to +80°C



Dimensions SF070A compressor



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

Dimensions AIM 6mm coldfinger

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