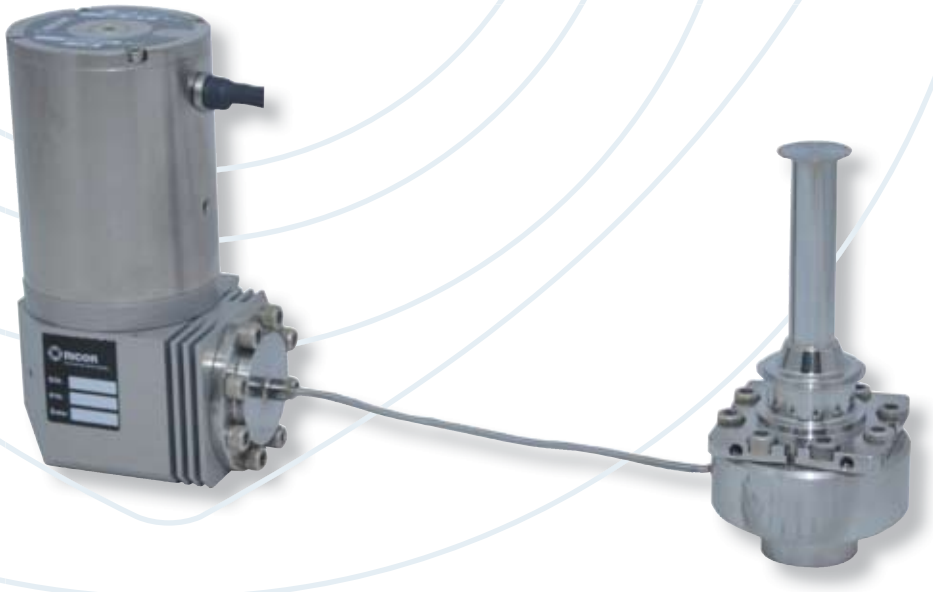
K549

Split Stirling 3/4W Micro Cooler



Model K549 IDA split Stirling rotary cryocooler was specially designed to meet the cooling demands of large format FPA detectors in military type gimbaled systems. This model is a member in RICOR's rotary IDAs, it shares the same cold finger/ dewar assembly as models K548/K508 integral Stirling rotary microcoolers. This cooler is based on the concept of direct detector mounting on the cooler cold finger - IDA. The K549 is designed to meet requirements of compactness, low acoustic noise and low vibrations. It also offers longer operating life, hence reduced life cycle costs. This cooler contains an onboard temperature controller that excels in accurate temperature stability and minimal temperature drift.

Detectors
Large Format Array
Mega Pixel Array
QWIP 65÷70 Kelvin
Scan Lines TDI
Dual Band/Color

Applications
Missile Warning Systems
Border Surveillance
UAV's
Observation Payloads
IR Search and Track
Fire Control Systems - AFV / MBT

RICOR

Cryogenic & Vacuum Systems

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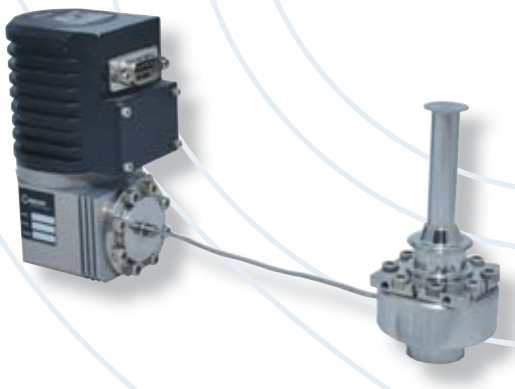
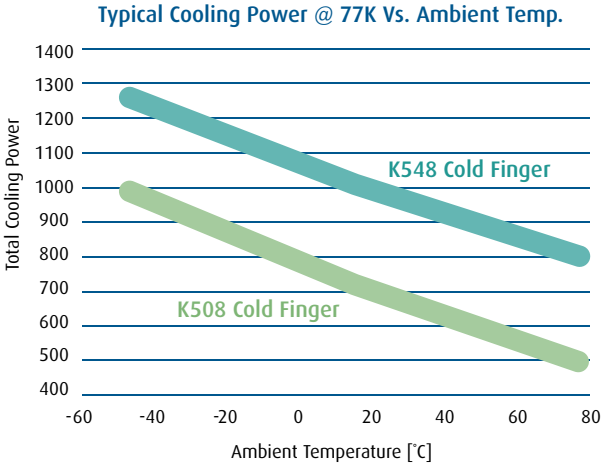
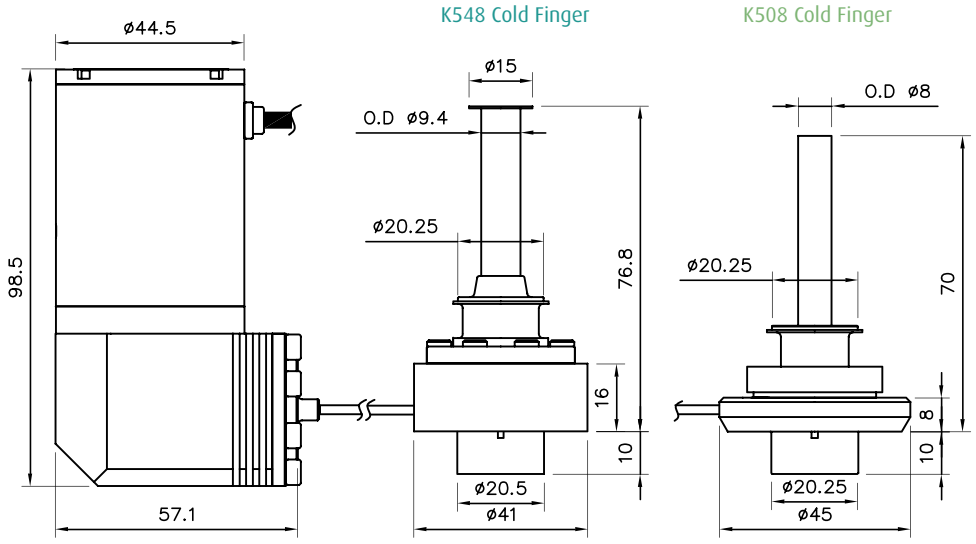


Specifications

	K548 Cold Finger	K508 Cold Finger
Cooler Weight	940 gr.	860 gr.
Input Voltage	18 ÷ 28 VDC	
Steady State Input Power	16WDC Typ. Dewar Heat Load 550mW @77K @23°C	11WDC Typ. Dewar Heat Load 280mW @77K @23°C
Maximum Input Power	40 WDC	
Ambient Temperature Range	Operational: -40°C ÷ +71°C Non Operational: -56°C ÷ +85°C	
Cooldown Time	< 5 min. Typ. 620J @77K @23°C	< 3 min. Typ. 340J @77K @23°C
Nominal Cooling Capacity @ 71°C	750mW @77K	500mW @77K
MTTF	> 10,000 hours	
Meets Environmental Conditions per MIL STD-810		





Dimensions in mm

Specifications are subject to changes without prior notice.

RICOR

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