RS08A

Rotary Actuator

Product Features

- Blade-less actuator for shutter or filter change operation
- Silent operation – undetectable
- Low surge current
- Best SWaP Performance
  - Mass: 3.3g
  - Embedded drive & control electronics in shutter body
- 90˚ in 130msec @ 25˚C Typical
- Holding and braking without power consumption
- MIL-STD-810F Compliant for shock, vibration, and temperature – Safe & Reliable

Product Description

The RS08A is the first actuator of its kind, utilizing a silent, miniature piezo actuator in an 8mm x 20mm package including the drive electronics. The RS08A is designed to work from a 3.3v battery and supports travel ranges from 35˚ to 120˚.

The RS08A allows for user definable shutter blade or filter changer, based on appropriate motion analysis of mass and moment of inertia. Nanomotion's proprietary feedback system is integrated into the grid, for closed loop device operation, stopping on electrical limits to avoid any noise from a mechanical hardstop.

ORDERING INFORMATION

RS08A Actuator consists of the shutter body with grid and mounting screw (no blade)

Part Number: RS080350KA-01
35˚ Stroke

Part Number: RS080450KA-01
45˚ Stroke

Part Number: RS080550KA-01
55˚ Stroke

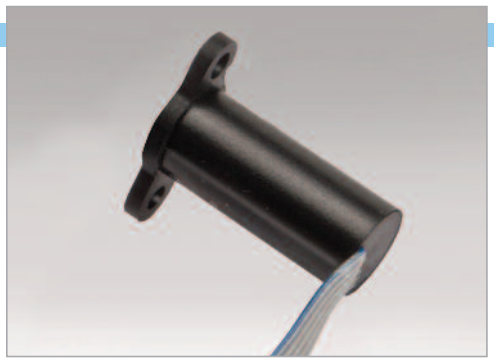
Part Number: RS080700KA-01
70˚ Stroke

Part Number: RS080900KA-01
90˚ Stroke

Part Number: RS081200KA-01
120˚ Stroke

RS08A

Rotary Actuator



Optronics Systems

- Thermal imaging (NUC) shutters
- Laser Shutters
- Filters

TECHNICAL SPECIFICATIONS

Mechanical
- Weight: 3.3 gr
- Dimensions: O8mm x 20mm Long

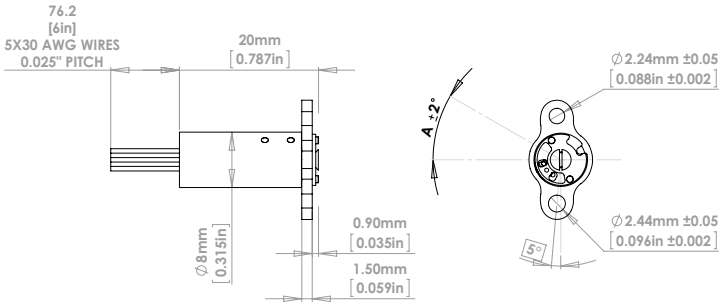
Performance
- Drive Mode: Closed Loop
- Stroke Angle: up to 120˚ ±2˚
- Operating Temperature: -40˚C to 70˚C
- Vibration: 10g rms hold position without power
- Shock: 500g max. (non-operational)
- 90˚ in 130msec @25˚C
- MTBF: 20,000 Hours Typ.

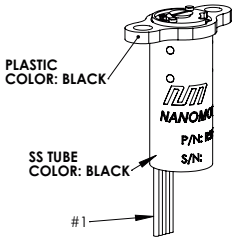
ELECTRICAL
- Drive/Control Board Embedded
- Drive Voltage: 3.3V

Power Consumption (Page 5)
- Max: 400mW
- Idle (on): 8mW

Communication
- IIC

MECHANICAL DRAWINGS AND INTERFACE





pin number	description
1	VCC 3.3V
2	GND
3	RESET/SHUTDOWN
4	SDA
5	SCL

Nanomotion Ltd.
Worldwide Headquarters

Mordot HaCarmel Industrial Park
Yokneam 20692 Israel
t: +972 73 2498000
f: +972 73 2498099
e: nano@nanomotion.com

Nanomotion Inc.
U.S. Headquarters

1 Comac Loop, Suite 14B2
Ronkonkoma, New York 11779
t: (800) 821-6266
t: (631) 585-3000
f: (631) 585-1947
e: nanoUS@nanomotion.com

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