



# RSH-800 Rotary Sensor Head

Continuous Deposition in the  
Most Demanding Processes



# Continuous Performance for Longer Runs

Extended PVD runs and precise thickness monitoring are essential for achieving maximum efficiency and consistent results. INFICON RSH-800 rotary sensor heads make this possible with a design that supports continuous operation, helping complex processes finish without delays.

Advanced six-crystal technology and water-cooled durability enable smooth performance during thick coatings or multi-layer depositions. Even in harsh environments with temperatures up to 300°C, RSH-800 ensures excellent crystal performance due to its thermally shielded housing. This results in uninterrupted production and accurate monitoring from start to finish.

When needed, crystals can be easily removed from the stainless steel housing and installed with our crystal flip tray packaging for easy on-site maintenance. Crystal position is incremented pneumatically by applying a one-second pulse to a 115 V (ac) or 24 V (dc) solenoid valve. A seven-pin connector provides individual switch closures to ground to indicate the current crystal position. Alternatively, position feedback is available through the BNC signal connection compatible with INFICON Zevision® IMC300 for easy system integration.



## ADVANTAGES AT A GLANCE

- ✓ Improve yield and film accuracy with the highest-quality design and manufacturing available
- ✓ Increase production with maximum uptime
- ✓ Enhance throughput with fast and easy crystal exchange
- ✓ Improve film quality and process optimization with crystal position feedback
- ✓ Save time with easy, on-site maintenance and installation
- ✓ Optimize system performance through worldwide expert applications support

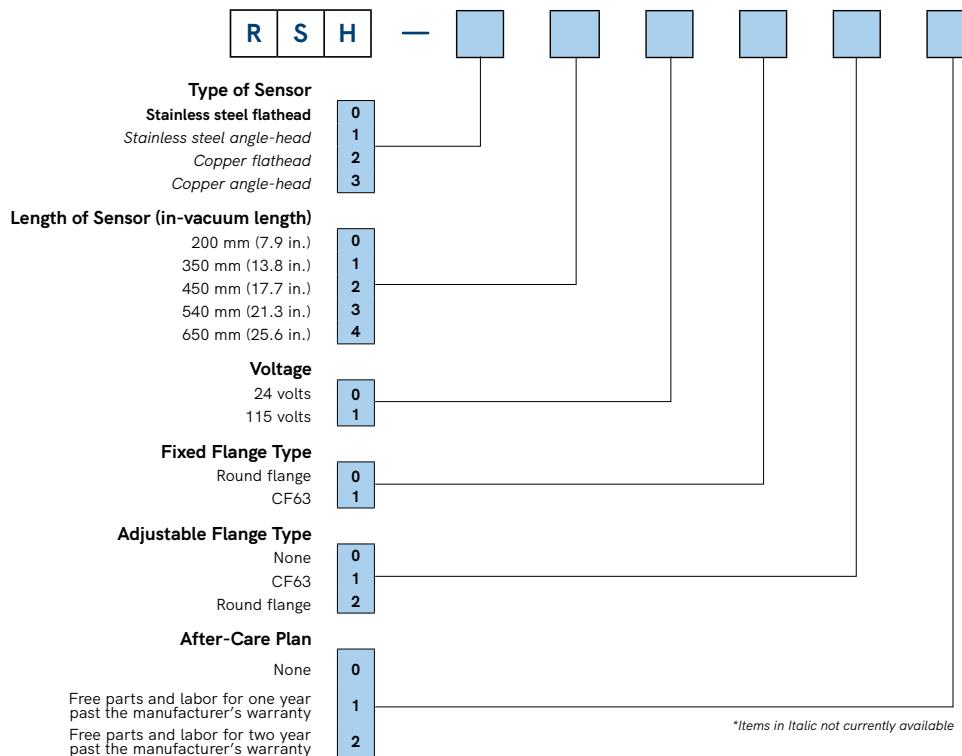
## Sensor Configurations

RSH-800 can be mounted in various locations within the vacuum chamber by configuring with a flathead for top-mount installation through an O-ring-sealed feedthrough or CF63 flange. Adjustable flange accessories are also available to position the sensor exactly where you need inside the chamber.



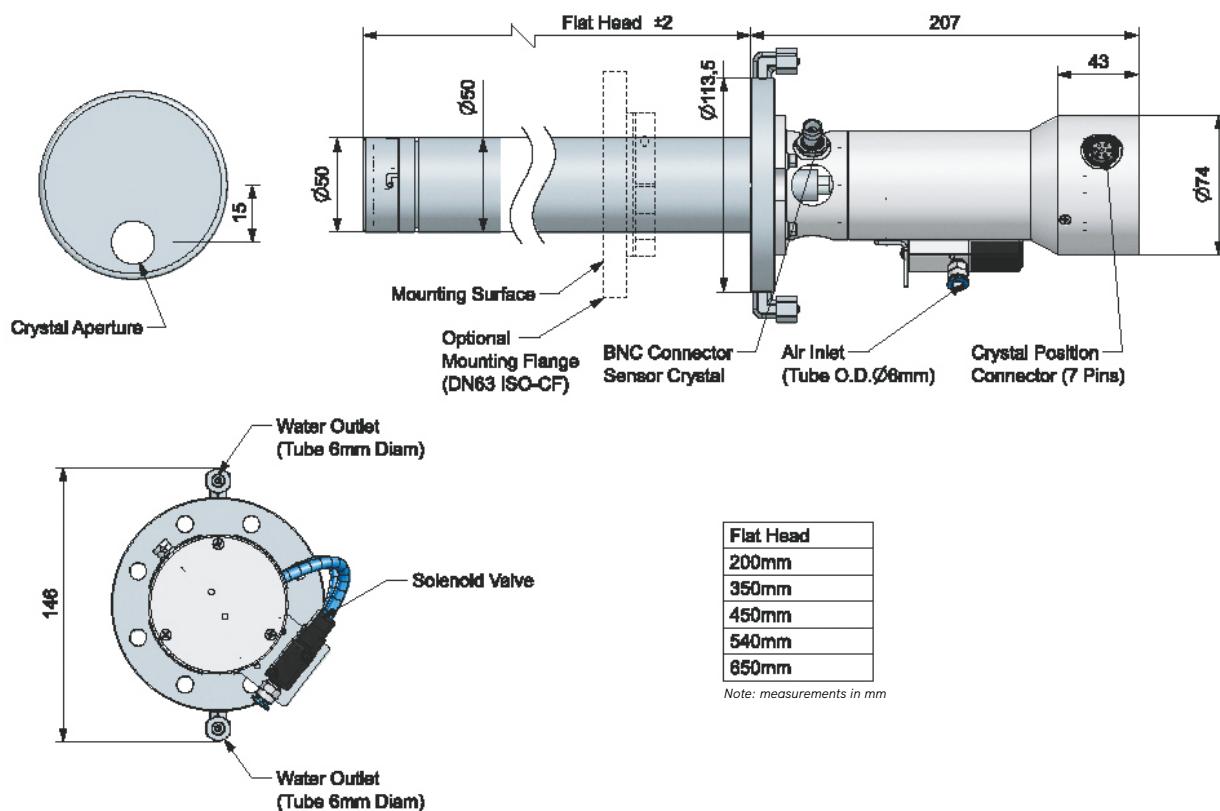
- RSH-800 is available in the following in-vacuum lengths:
- 200 mm (7.9 in.)
  - 350 mm (13.8 in.)
  - 450 mm (17.7 in.)
  - 540 mm (21.3 in.)
  - 650 mm (25.6 in.)

## CONFIGURATION OPTIONS



## DIMENSIONS

### RSH-800 FLATHEAD CF63 SERIES



## RSH-800 ROTARY SENSOR HEAD

SPECIFICATIONS			
Number of crystals		Six	
Crystal size		14 mm (0.550 in.) diameter	
Installation aperture		50.8 mm (2.0 in.) diameter	
Overall length		See drawing inside	
Power requirement		24 V (dc) Solenoid valve 21.6-26.4 V (dc), 40 mA 115 V (ac) Solenoid valve 90-132 V (ac), 36/32 mA rms (50/60 Hz)	
Crystal switching method		Air actuated @ 55 psi (4 kg/cm <sup>2</sup> ) regulated	
Cooling method		Water cooled @ 5 L/m at 2 kg/cm <sup>2</sup> (28 psi) (Do not allow to freeze)	
Air and water connections		One 6 mm (0.25 in.) quick connect for air, two 1/8 in. compression fittings for water	
Maximum bakeout temperature without water		130°C	
Operating temperature		300°C max with water cooling and stainless steel head cover	
Weight		3.8 kg (8.5 lb.), varies with overall length	
Materials		304 stainless steel, PEEK, beryllium nickel	
ACCESSORIES			
PN	DESCRIPTION	PN	DESCRIPTION
784-600-G1S	Adjustable flange, round	784-600-G2S	Adjustable flange, CF63
SPARE PARTS LIST			
PN	DESCRIPTION	PN	DESCRIPTION
784-553-G1S	Spring Retainer Assembly - Flat	TBD	Shaft & Microdot 6mm DIA O-ring
TBD	24 V (dc) Solenoid Valve Assembly	784-542-P1S	200 mm (7.9 in.) Signal Wire Assembly
TBD	115 V (ac) Solenoid Valve Assembly	784-542-P2S	350 mm (13.8 in.) Signal Wire Assembly
784-544-G1S	Crystal Retainer Assembly, Flat	784-542-P3S	450 mm (17.7 in.) Signal Wire Assembly
070-2266S	Retaining Screw for Flat Crystal Retainer	784-542-P4S	540 mm (21.3 in.) Signal Wire Assembly
784-501-P1S	Crystal Holder, Flat	784-542-P5S	650 mm (25.6 in.) Signal Wire Assembly
784-545-P1S	Stainless Steel Cover	784-506-G1S	Resistor Grid
784-554-G1S	Signal Support Assembly	059-0857S	Actuator Air Fittings
784-555-G1S	Spring Retainer Contact Kit - Flat (set of six)	059-0856S	Solenoid Air Fittings
784-524-P1S	Spring Retainer Contact	069-0201S	6 mm Air Tubing
784-552-G1S	Spring Contact for Crystal Retainer Assembly	TBD	Water Fittings
051-2558S	7-pin Male Connector	TBD	Adjustable Flange O-ring
070-2312S	Shaft Bearing (in-vacuum)	784-556-G1S	Microswitch Wire Harness Assembly
070-2315S	Shaft Bearing (atmosphere)		