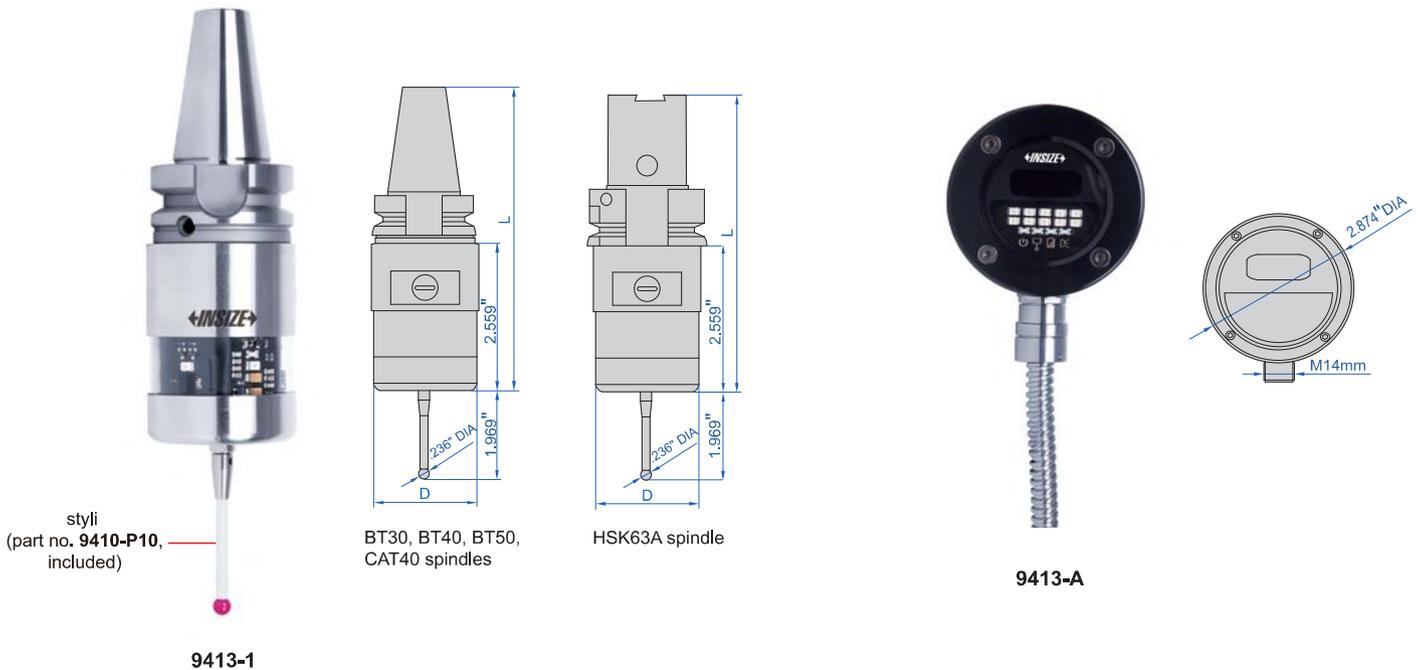


INFRARED TRANSMISSION PROBES FOR CNC MACHINE TOOLS

IP68
WATERPROOF



- On-machine measurement of all kinds of small and medium-sized machining centers, CNC boring, milling machines and five-axis CNC machine tools
- Automatically set the workpiece coordinate and machining reference point before CNC machining process
- Automatically measure dimension and position coordinate during CNC machining
- Measure dimension, shape and position after CNC machining is completed
- Four kinds of SSR signals such as probe status, error, low voltage and pulse are transmitted to CNC machine tools
- M code is used to control on or off of probes
- Infrared transmission, strong anti-interference
- Infrared transmission/reception range: 197"
- Supplied with automatic measurement software
- Optional accessory: styli



PROBE SPECIFICATION

Part No.	9413-1	9413-2	9413-3	9413-4	9413-5
Probe length (L)	5.512"	6.535"	8.504"	6.614"	5.354"
Probe diameter (D)	1.890"	1.890"	1.890"	1.890"	1.890"
Applicable spindle *	BT30	BT40	BT50	CAT40	HSK63A
Trigger accuracy of styli in any direction	39μin				
Protection stroke triggered by styli in all directions	X and Y axis stroke: ±12.5°, Z axis stroke: .197"				
Trigger force of styli in all directions	X and Y axis: 1-1.6N, Z axis: 5-10N				
Dust/waterproof	IP68				
Power supply	2xLS14250 lithium battery				

*SK and ISO spindle probes also can be customized

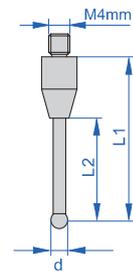
RECEIVER SPECIFICATION

Part No.	9413-A
Protection function	low battery voltage or probe transmitting signal all the time**
Applicable probe	part no. 9413-1, 9413-2, 9413-3, 9413-4, 9413-5
Cable length	315"
Dust/waterproof	IP68
Power supply	input voltage: 24V±10%(DC), load current: 50mA

** When battery voltage is low or probe is in wrong state, receiver sends a signal to CNC machine to stop working

STYLI(OPTIONAL)

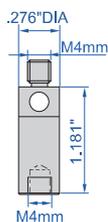
Part No.	L1	L2	d	Material of rod***	Material of ball
9410-P1	.709"	.512"	.157"	stainless steel	ruby
9410-P2	.709"	.531"	.197"	stainless steel	ruby
9410-P3	.728"	.512"	.118"	stainless steel	ruby
9410-P4	.748"	.315"	.079"	carbide	ruby
9410-P5	.768"	.157"	.039"	carbide	ruby
9410-P6	1.969"	1.575"	.079"	carbide	ruby
9410-P7	1.969"	1.339"	.197"	ceramic	ruby
9410-P8	3.937"	3.386"	.236"	ceramic	ruby
9410-P9	1.575"	1.181"	.157"	ceramic	ruby
9410-P10	1.969"	1.417"	.236"	ceramic	ruby



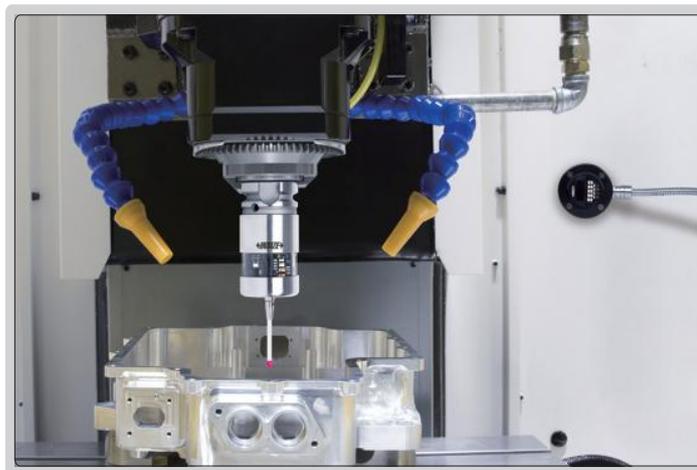
*** For stainless steel or carbide rods, it is recommended to use extension rods to protect spindles in case of break

EXTENSION ROD(OPTIONAL)

Part No.	Material
9410-R1	ceramic

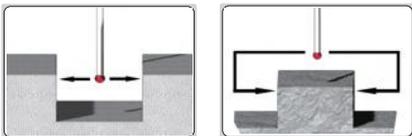


application

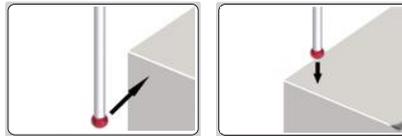


AUTOMATIC MEASUREMENT SOFTWARE (INCLUDED)

1. Styli automatic calibration
2. Protection of stylus during probe movement (avoid collision)
3. Groove and boss measurement

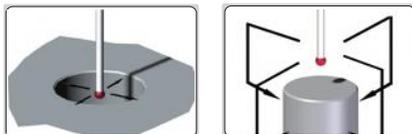


5. X or Y single-surface measurement

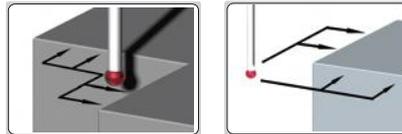


7. 4th axis measurement
8. Angle on X and Y plane measurement
9. Three points measurement of arc

4. Bore and axis measurement



6. Internal and external corner measurement



10. Measure the distance between two holes

