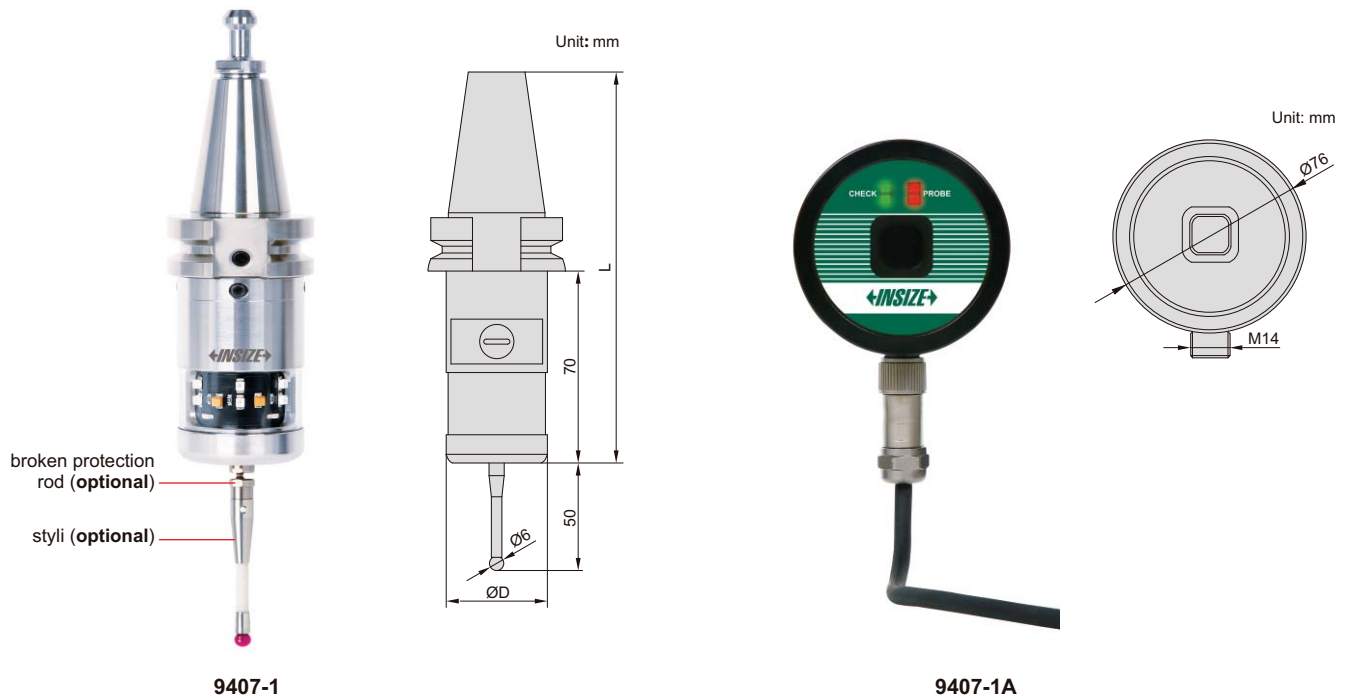


# OPTICAL TRANSMISSION PROBES FOR CNC MACHINE TOOLS



**IP68**  
WATERPROOF



- On-machine measurement
- Multi-channel transmission between probes and receivers, for anti-interference
- Transmit three kinds of signals: trigger, contact and low battery voltage
- With spindle protection function
- Optical transmission range: 1m, 3m, 5m
- Automatic power off in 3 seconds, move styli to power on

## OPTICAL PROBE SPECIFICATION

Code	9407-1	9407-2	9407-3	9407-4	9407-5
Probe length (L)	140mm	180mm	180mm	180mm	180mm
Probe diameter (ØD)	40mm	46.5mm	46.5mm	46.5mm	46.5mm
Trigger accuracy of styli in any direction	1µm				
Protection stroke triggered by styli in all directions	X and Y axis stroke: ±12.5°, Z axis stroke: 5mm				
Trigger force of styli in all directions	X and Y axis: 0.9N, Z axis: 6N				
Applicable spindle*	BT30	BT50	BT40	HSK63A	CAT40
Dust/waterproof	IP68				
Power supply	2×LS14250 lithium battery				

\* HSK, SK and ISO series spindles also can be customized.

## RECEIVER SPECIFICATION

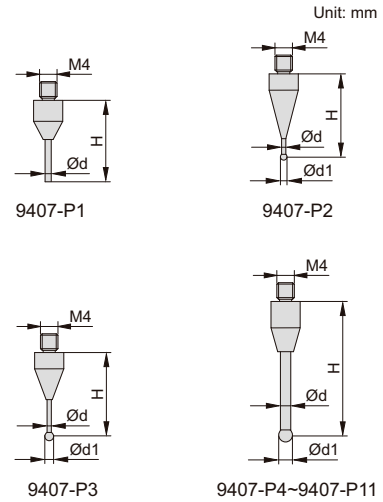
Code	9407-1A
Protection function	low battery voltage or probe transmitting signal all the time **
Applicable probe	code 9407-1, 9407-2
Cable length	5m
Dust/waterproof	IP68

\*\* When the battery voltage is low or the probe transmits signal all the time, the receiver will send a signal to the machine tool to stop working.

### STYLI (OPTIONAL)

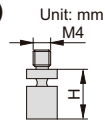
(mm)

Code	H	Ød	Ød1	Material of measuring face
9407-P1	20	1	—	carbide
9407-P2	19.5	0.7	1	ruby
9407-P3	19	1.4	2	ruby
9407-P4	20	0.7	1	ruby
9407-P5	20	1.5	2	ruby
9407-P6	20	2	3	ruby
9407-P7	20	2	4	ruby
9407-P8	50	3	4	ruby
9407-P9	50	3.8	5	ruby
9407-P10	50	4.5	6	ruby
9407-P11	75	3.8	5	ruby

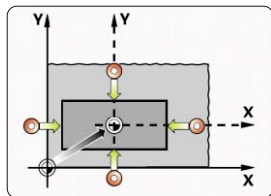
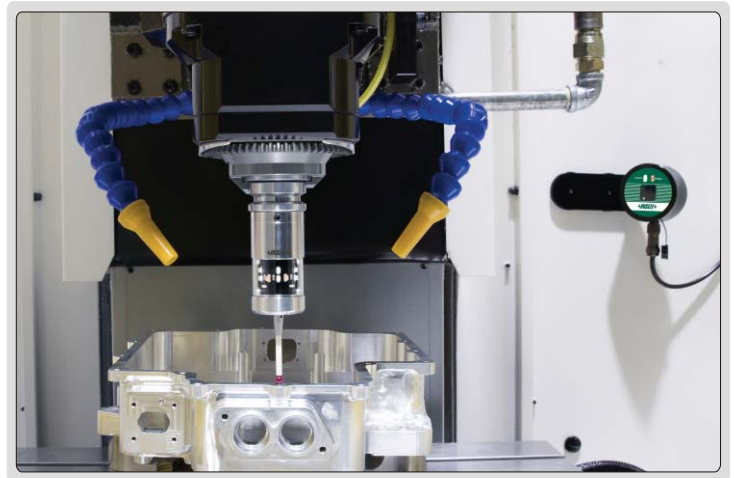


### BROKEN PROTECTION ROD (OPTIONAL)

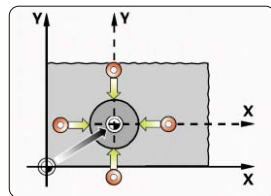
Code	H
9407-R1	12mm
9407-R2	22mm



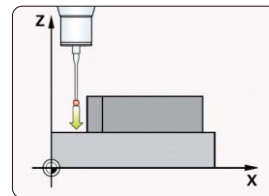
application



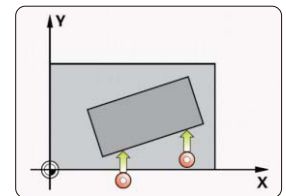
find center of rectangular boss



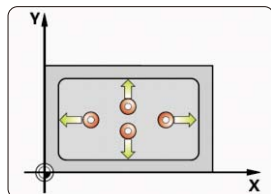
find center of the round boss



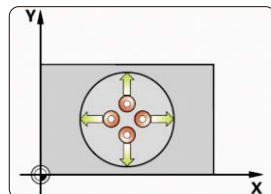
measure position of point on any axis



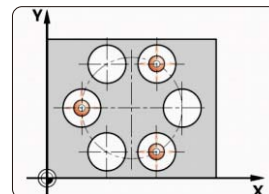
measure inclination of line



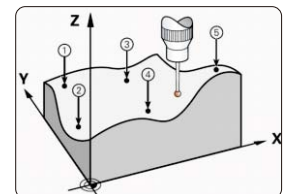
measure rectangular cavity



measure round cavity



measure center of holes



measure freeform surfaces