# **ABSOLUTE Coolant Proof Caliper**

SERIES 500 — with Dust/Water Protection Conforming to IP67 Level

#### **FEATURES**

- Can be used in workshop conditions exposed to coolant, water, dust or oil.
- Easy to use no need to wipe or clean the
- Advanced design styling.

- Incorporates absolute measurement
- Automatic power-on/off.
- Data output function.





(Refer to the page 9 for details.)





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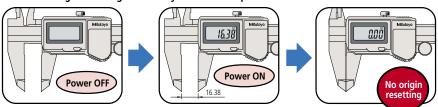
(Refer to the page 9 for details.)







Built-in ABS (absolute) scale means that these calipers are ready to use immediately after poweron without origin resetting. It's as easy as vernier caliper measurements.



Certificate of inspection



Measurement data output function is available with a waterresistant SPC cable.



### **Technical Data**

±0.02mm (≤200mm), ±0.03mm (>200mm)

(excluding quantizing error) 0.01mm or .0005 "/0.01mm Resolution:

Repeatability:0.01mm Display: ICD

Length standard: ABSOLUTE electromagnetic induction linear

encoder Max. response speed: Unlimited SR44 (1 pc.), 938882 Battery:

Approx. 3 years under normal use (1 year: over 300mm models)

Dust/Water protection level: IP67

Origin-set, Zero-setting, Automatic power on/off, Data output, inch/mm conversion (inch/mm models) Low voltage, Counting value composition error

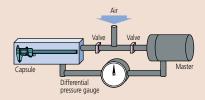
## **Optional Accessory**

05CZA624: SPC cable with data switch (1m) 05CZA625: SPC cable with data switch (2m)



# Air leakage detection system used for water-proof testing

Generally, air leakage tests are performed to evaluate water resistance. Testing begins by placing a measuring tool into the capsule. Next, air with equivalent pressure is supplied to the capsule and the master, then the valves are closed. If none of the air in the capsule seeps into the measuring tool, the capsule's air pressure will remain equal to that in the master, and the differential pressure gauge will continue to point to the center. However, if some air does seep into the measuring tool, it will create an air pressure difference in the amount indicated by the differential pressure gauge. Thus, detection of air pressure differences is used as a criterion for judging leakage. Every single unit of the ABS Coolant Proof calipers and Coolant Proof micrometer is tested this way for air leakage to help ensure product quality.





# **IP66** protection level

Level 6: Dust-tight

No ingress of dust.

Level 6: Protected against powerful water jet. Water projected in powerful jets\* against the

enclosure from any direction shall have no harmful effects.

\*Size of direct jets: uses 12.5 mm (inner diameter) nozzle emitting a 100 kPa jet of water at 100 liters per minute for at least 3 minutes from a distance of

approx. 3 meters.

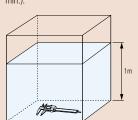


# **IP67** protection level

Level 6: Dust-tight

No ingress of dust. Protected against the effects of temporary immersion in water. Level 7:

Ingress of water in quantities causing harmful effects shall not be possible when the enclosure is temporarily immersed 1 meter in water under standardized conditions of pressure and time (30 min.).



### **SPECIFICATIONS**

Metric

| Range     | Order No.   | Remarks (depth measuring bar / thumb roller / others) |                   |   |
|-----------|-------------|---|-------------------|---|
| 0 - 150mm | 500-702-10* | Blade   | with thumb roller | _   |
| 0 - 150mm | 500-712-10  | Blade   | with thumb roller | _   |
| 0 - 150mm | 500-706-11* | Blade   | _                 | _   |
| 0 - 150mm | 500-716-11  | Blade   | _                 | _   |
| 0 - 150mm | 500-709-11* | ø1.9mm rod  | _                 | _   |
| 0 - 150mm | 500-719-10  | ø1.9mm rod  | with thumb roller | _   |
| 0 - 150mm | 500-721-10  | Blade   | with thumb roller | Carbide-tipped jaws for ID measurement      |
| 0 - 150mm | 500-723-10  | Blade   | with thumb roller | Carbide-tipped jaws for OD & ID measurement |
| 0 - 150mm | 500-727-11  | Blade   | _                 | Carbide-tipped jaws for OD & ID measurement |
| 0 - 200mm | 500-703-10* | Blade   | with thumb roller | _   |
| 0 - 200mm | 500-713-10  | Blade   | with thumb roller | _   |
| 0 - 200mm | 500-707-11* | Blade   | _                 | _   |
| 0 - 200mm | 500-717-11  | Blade   | _                 | _   |
| 0 - 200mm | 500-722-10  | Blade   | with thumb roller | Carbide-tipped jaws for ID measurement      |
| 0 - 200mm | 500-724-10  | Blade   | with thumb roller | Carbide-tipped jaws for OD & ID measurement |
| 0 - 200mm | 500-728-11  | _   | _                 | Carbide-tipped jaws for OD & ID measurement |
| 0 - 300mm | 500-714-10  | _   | with thumb roller | _   |
| 0 - 300mm | 500-718-11  | _   | _                 | _   |
| 0 - 300mm | 500-704-10* | _   | with thumb roller | _   |
| 0 - 300mm | 500-708-11* | _   | _                 | _   |

<sup>\*</sup>without SPC data output

# Inch/Metric

| Range   | Order No.   | Remarks (depth measuring bar / thumb roller / others) |                   |   |
|---------|-------------|---|-------------------|---|
| 0 - 6"  | 500-752-10* | Blade   | with thumb roller | _   |
| 0 - 6"  | 500-762-10  | Blade   | with thumb roller | _   |
| 0 - 6"  | 500-768-10* | ø3/40" rod  | with thumb roller | _   |
| 0 - 6"  | 500-769-10  | ø3/40" rod  | with thumb roller | _   |
| 0 - 6"  | 500-731-10* | Blade   | with thumb roller | Carbide-tipped jaws for ID measurement      |
| 0 - 6"  | 500-735-10  | Blade   | with thumb roller | Carbide-tipped jaws for ID measurement      |
| 0 - 6"  | 500-733-10* | Blade   | with thumb roller | Carbide-tipped jaws for OD & ID measurement |
| 0 - 6"  | 500-737-10  | Blade   | with thumb roller | Carbide-tipped jaws for OD & ID measurement |
| 0 - 8"  | 500-753-10* | Blade   | with thumb roller | _   |
| 0 - 8"  | 500-763-10  | Blade   | with thumb roller | _   |
| 0 - 8"  | 500-732-10* | Blade   | with thumb roller | Carbide-tipped jaws for ID measurement      |
| 0 - 8"  | 500-736-10  | Blade   | with thumb roller | Carbide-tipped jaws for ID measurement      |
| 0 - 8"  | 500-734-10* | Blade   | with thumb roller | Carbide-tipped jaws for OD & ID measurement |
| 0 - 8"  | 500-738-10  | Blade   | with thumb roller | Carbide-tipped jaws for OD & ID measurement |
| 0 - 12" | 500-764-10  | _   | with thumb roller | _   |
| 0 - 12" | 500-754-10* | _   | with thumb roller | _   |

<sup>\*</sup>without SPC data output

# **DIMENSION**

