

Digital Caliper with waterproof scale
IP67 ABSOLUTE
Coolant Proof Caliper

Small Tool Instruments
and Data Management

COOLANT PROOF™ IP67



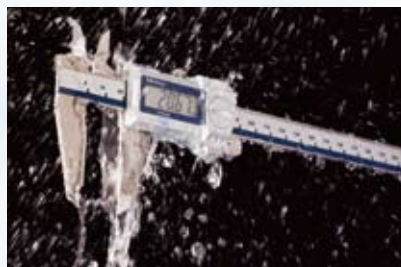
Digital Caliper with waterproof scale IP67 ABSOLUTE Coolant Proof Caliper



COOLANT PROOF™ IP67

COOLANT PROOF is the universal term for Mitutoyo Digimatic Small Tool Instruments that are not only resistant to dust and water ingress (rated to IP65 or better) but also to deterioration of materials due to contact with the cutting oil or coolant fluids in normal use.

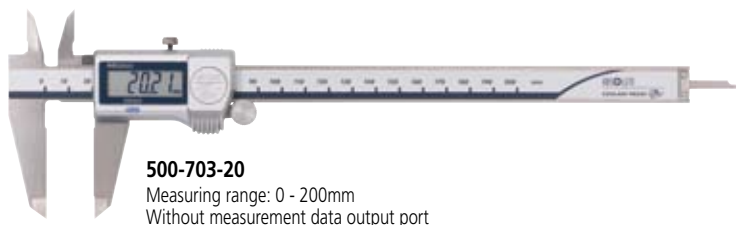
Note: Some types of aggressive cutting oil or coolant may degrade the sealing materials over time.



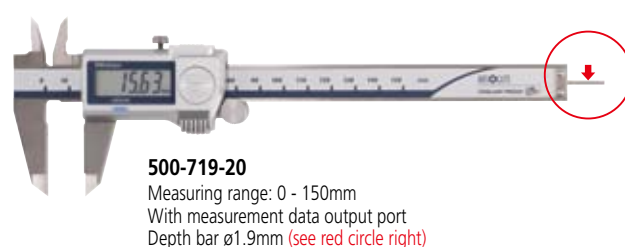
500-713-20
Measuring range: 0 - 200mm
With measurement data output port



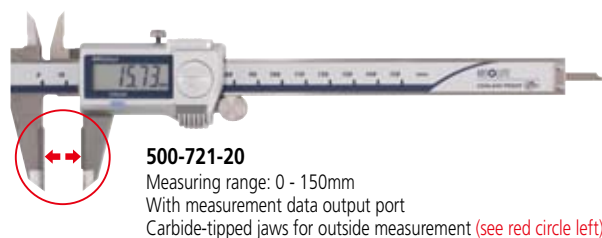
500-702-20
Measuring range: 0 - 150mm
Without measurement data output port



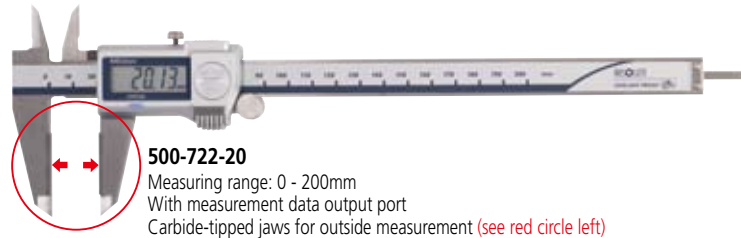
500-703-20
Measuring range: 0 - 200mm
Without measurement data output port



500-719-20
Measuring range: 0 - 150mm
With measurement data output port
Depth bar \varnothing 1.9mm (see red circle right)



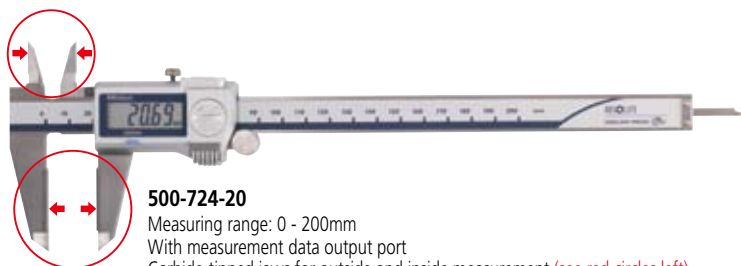
500-721-20
Measuring range: 0 - 150mm
With measurement data output port
Carbide-tipped jaws for outside measurement (see red circle left)



500-722-20
Measuring range: 0 - 200mm
With measurement data output port
Carbide-tipped jaws for outside measurement (see red circle left)



500-723-20
Measuring range: 0 - 150mm
With measurement data output port
Carbide-tipped jaws for outside and inside measurement (see red circles left)



500-724-20
Measuring range: 0 - 200mm
With measurement data output port
Carbide-tipped jaws for outside and inside measurement (see red circles left)



500-712-20
 Measuring range: 0 - 150mm
 With measurement data output port

Full size

FEATURES

- This standard ABS coolant-proof caliper is rated to protection code IP67, which allows trouble-free use even in situations where it is exposed to coolant or cutting oil. A 100% air-leak test before product shipment guarantees IP67 performance.
- The character height on the LCD has been enlarged to 9mm (former model: 7.4mm) for enhanced ease of use.
- Simple design with only one switch allows easy measurement operation.
- The Auto-Power ON/OFF function blanks the LCD by turning off the power if the caliper is not used for about 20 minutes. However, the origin point of the ABS length measuring system is still stored in memory. Moving the slider automatically restores power to the LCD.
- The built-in ABS (absolute) scale eliminates the need for origin setting at every power-on to allow measurement to start immediately.

- This type features 4-way operation including outside, inside, step and depth measurements.
- A screwdriver-free battery case cap allows speedy replacement of the battery.
- Lower current consumption has drastically improved battery life to 5 years (formerly: 3 years).
- Models equipped with the measurement data output port can be integrated into statistical process control and networked measurement systems.
- An inspection certificate is supplied to verify conformance to specification but note this is undated so cannot be used as a calibration certificate.



Battery cap (small coin openable)

SPECIFICATIONS

| Metric | | | | | |
|------------|-----------|------|------------------------------|--|--|
| Order No. | Range | Mass | Measurement data output port | Remarks | |
| 500-702-20 | 0 - 150mm | 168g | — | | |
| 500-703-20 | 0 - 200mm | 198g | — | | |
| 500-712-20 | 0 - 150mm | 168g | — | | |
| 500-713-20 | 0 - 200mm | 198g | — | | |
| 500-719-20 | 0 - 150mm | 168g | — | Depth bar ø1.9mm | |
| 500-721-20 | 0 - 150mm | 168g | ✓ | Carbide-tipped jaws for outside measurement | |
| 500-722-20 | 0 - 200mm | 198g | ✓ | Carbide-tipped jaws for outside and inside measurement | |
| 500-723-20 | 0 - 150mm | 168g | — | Depth bar ø1.9mm | |
| 500-724-20 | 0 - 200mm | 198g | — | Depth bar ø1.9mm | |

* Not including quantizing error of ±1 count in LSD

| Inch/Metric | | | | | |
|-------------|--------|------|------------------------------|--|--|
| Order No. | Range | Mass | Measurement data output port | Remarks | |
| 500-731-20 | 0 - 6" | 168g | — | Carbide-tipped jaws for outside measurement | |
| 500-732-20 | 0 - 8" | 198g | — | Carbide-tipped jaws for outside and inside measurement | |
| 500-733-20 | 0 - 6" | 168g | — | Carbide-tipped jaws for outside and inside measurement | |
| 500-734-20 | 0 - 8" | 198g | — | Carbide-tipped jaws for outside and inside measurement | |
| 500-735-20 | 0 - 6" | 168g | — | Carbide-tipped jaws for outside measurement | |
| 500-736-20 | 0 - 8" | 198g | ✓ | Carbide-tipped jaws for outside and inside measurement | |
| 500-737-20 | 0 - 6" | 168g | ✓ | Carbide-tipped jaws for outside and inside measurement | |
| 500-738-20 | 0 - 8" | 198g | — | Carbide-tipped jaws for outside and inside measurement | |
| 500-752-20 | 0 - 6" | 168g | — | Depth bar ø1.9mm | |
| 500-753-20 | 0 - 8" | 198g | — | Depth bar ø1.9mm | |
| 500-762-20 | 0 - 6" | 168g | ✓ | Depth bar ø1.9mm | |
| 500-763-20 | 0 - 8" | 198g | ✓ | Depth bar ø1.9mm | |
| 500-768-20 | 0 - 6" | 168g | — | Depth bar ø1.9mm | |
| 500-769-20 | 0 - 6" | 168g | ✓ | Depth bar ø1.9mm | |

* Not including quantizing error of ±1 count in LSD

DIMENSIONS

| Range | A | B | C | D | H | L |
|---------|------|------|------|----|----|-----|
| 0 - 150 | 16.5 | 21 | 14.6 | 40 | 16 | 233 |
| 0 - 200 | 20 | 24.5 | 18.1 | 50 | 16 | 290 |

Outside jaw thickness = 3.5mm
 Main beam thickness = 3.5mm

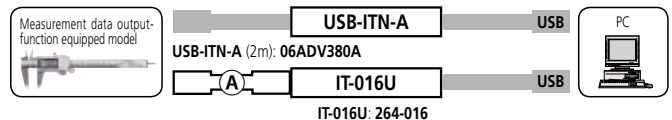
TECHNICAL DATA

- Resolution: 0.01mm or .0005"/0.01mm
- Accuracy: ±0.02mm
- Repeatability: 0.01mm
- Quantizing error: Not including ±1 count
- Power supply: **SR44** (1 pc), **938882**. (Note that the battery supplied is for initial operational checks only.)
- Battery life: Approx. 5 years under normal use
- Max. response speed: Unlimited
- Thumb roller: Included

Measurement Data Recording Tools & Connecting Cable Options

These options are dedicated interfaces (wired or wireless) that allow simple entry of measurement data to a PC.

- Wired Connection to PC via USB Input Tool Series (Refer to Catalog No. E12007.)

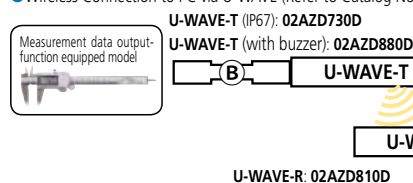


Connecting cables specific to output-function equipped models

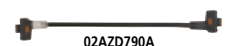
- (A) 1m: **05CZA624**
 2m: **05CZA625**



- Wireless Connection to PC via U-WAVE (Refer to Catalog No. E12000.)



- (B) For standard use (160mm): **02AZD790A**
 For foot switch use: **02AZE140A**





Whatever your challenges are, Mitutoyo supports you from start to finish.

Mitutoyo is not only a manufacturer of top quality measuring products but one that also offers qualified support for the lifetime of the equipment, backed up by comprehensive services that ensure your staff can make the very best use of the investment.

Apart from the basics of calibration and repair, Mitutoyo offers product and metrology training, as well as IT support for the sophisticated software used in modern measuring technology. We can also design, build, test and deliver bespoke measuring solutions and even, if deemed cost-effective, take your critical measurement challenges in-house on a sub-contract basis.



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