

# The 5-Second Pipettes BLAUBRAND®

Reduced waiting time and simplified handling – the result: much easier pipetting!

#### ■ Now only 5 seconds

By making structural changes to the pipette, BRAND has reduced the waiting time by two-thirds to only 5 seconds, while retaining the same volume precision.

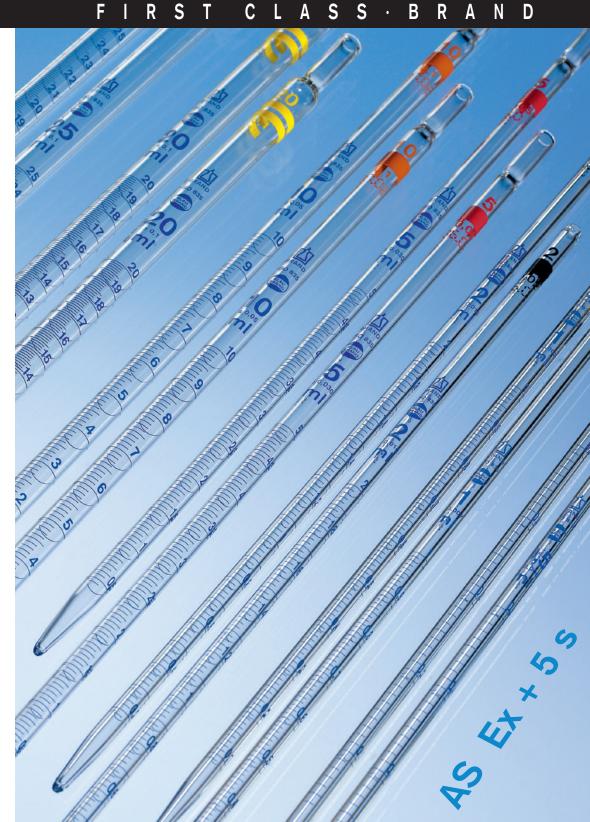
#### Now set the meniscus only once at partial volume

Because the nominal volume of type 2 graduated pipettes is located at the top, you can set the meniscus directly to the desired partial volume.

#### ■ DIN EN ISO 835 standard

BRAND was instrumental in getting these pipettes and protocols accepted as a standard for graduated pipettes.

Publication of the standard replaces the previous DIN 12697 standard. From now on, the waiting time for all class AS graduated pipettes is a mere 5 seconds.





Zero point at the top

Type 3

Nominal volume at the top

In the DIN EN ISO 835, the waiting time for graduated pipettes class AS was reduced from 15 to 5 seconds and the type 2, total delivery, nominal volume at top, was

We recommend the graduated pipette type 2 as with these pipettes the meniscus needs to be set only once to achieve exact pipetting. In contrast, with types 1 and 3, there is a risk of over-dispensing while setting the meniscus the second time. In such a case, the sample would have to be prepared again.

## partial total delivery delivery 0 0 0

Type 1

1. Draw volume a bit over 0

- 2. Set meniscus to 0
- 3. Deliver liquid until just before the 3 ml marking
- **4.** Wait 5 sec.
- **5.** Deliver desired volume by releasing liquid slowly to set meniscus exactly to 3 ml
- 6. Wipe tip
- 7. Discard remaining volume

Type 2

total delivery

- 1. Draw volume a bit over 3 ml
- 2. Set meniscus
- 3. Deliver volume
- **4.** Wait 5 sec.
- 5. Wipe tip

#### Precision pipette tip



Optimized flow geometry in the tip ensures reliable liquid dispensing from bulb and graduated pipettes.

The mechanical resilience of the tip and its fire-polished edges ensure a long service life.

### Graduated pipettes, type 2, total delivery

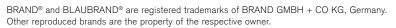
BLAUBRAND®, class AS, nominal volume at the top, DE-M marking

AR-Glas®. DIN EN ISO 835. Calibrated to deliver (TD, Ex). Incl. one batch certificate. Pack of 12 (20, 25, 50 ml: Pack of 6).

Volume ml	Error Limit ml	Subdivision ml	Cotton plug upper end	BLAUBRAND® Cat. No.	BLAUBRAND® ETERNA Cat. No.
0.5	0.006	0.01	no	278 16	278 36
1	0.007	0.01	no	278 17	278 37
1	0.007	0.01	yes	278 27	278 47
1	0.007	0.1	no	278 18	-
2**	0.010	0.01	no	278 29	-
2	0.010	0.02	no	278 19	278 39
2	0.010	0.02	yes	278 28	278 48
2	0.010	0.1	no	278 20	-
5	0.030	0.05	yes	278 21	278 41
5	0.030	0.1	yes	278 22	278 42
10	0.05	0.1	yes	278 23	278 43
20	0.1	0.1	yes	278 24	278 44
25	0.1	0.1	yes	278 25	278 45
50*	0.2	0.5	yes	278 26	-

<sup>\*</sup> in addition to the ISO range \*\* in addition to the ISO range, not conformity certified

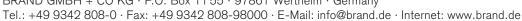
Additional information on the graduated pipettes can be found at www.brand.de



Our technical literature is intended to inform and advise our customers. However, the validity of general empirical values, and of results obtained under test conditions, for specific applications depends on many factors beyond our control. Please appreciate, therefore, that no claims can be derived from our advice. The user is responsible for checking the appropriateness of the product for any particular application.

Subject to technical modifications without notice. Errors excepted.

BRAND GMBH + CO KG · P.O. Box 1155 · 97861 Wertheim · Germany







Total delivery

Wait 5 sec.

once

at partial volume

Set meniscus only

