

Dispensette® TA Trace Analysis

The Dispensette® TA provides outstanding performance for precise volume dispensing of high-purity media for trace analysis. Also suitable for HF with platinum-iridium valve spring.

The components of the fluid path are constructed of the highest purity materials, such as PFA, PTFE and sapphire. Depending on application, either platinum-iridium or tantalum valve springs can be chosen. The volume range is from 1 to 10 ml. Especially well suited for dispensing acids, bases and hydrogen peroxide. Trace metal content of dispensed liquid is generally in the low ppb range, or, depending on application, even in the ppt range.



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A Closer Look...

Designed for use in trace analysis. The high-purity materials release virtually no metal ions after appropriate



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Use and Handling



Replaceable dispensing cartridge

If the piston seal is worn after an extended period of use, the entire dispensing cartridge can easily be replaced without tools by the user. The cartridge is fully adjusted at the factory, and delivered with a performance certificate. No calibration is required after replacement.



Serial dispensing

For easy serial dispensing, an optional flexible discharge tube with textured safety handle (not approved for HF) permits fast and precise dispensing, even into narrow test tubes. Full functionality of the SafetyPrime™ recirculation valve and the safety discharge system is maintained after installation.

General features of the Dispensette® TA bottle-top dispenser

- Plastics in contact with media consist of high-purity materials such as PTFE, ETFE, FEP, and PFA. The purest sapphire is used for replaceable valves. Depending on the application, platinum-iridium or tantalum are available as spring materials.
- A field-tested cleaning process before use in trace analysis is described in the operating manual.
- If contamination of the bottle contents must be avoided, we recommend using the device without the SafetyPrime™ recirculation valve.
- The 45 mm standard thread plus the included adapters fit most common lab bottles.
- The valve block can be rotated 360° so that the bottle label always faces the user for safety.
- Telescoping filling tube adjusts to different bottle sizes.
- Easy disassembly for replacement of the dispensing cartridge.

Parts in contact with medium

Various fluoroplastics (ETFE, FEP, PFA, PTFE), ${\rm Al_2O_3}$ sapphire and platinum-iridium or tantalum, depending on design.

Operating limits

Vapor pressure max. 600 mbar viscosity max. 500 mm²/s temperature max. 40 °C density max. 3.8 g/cm³

Recommended application range

Dispensing medium	Valve spring: Pt - Ir	Valve spring: Ta
Acetic acid	+	+
Ammonia solution	+	+
Bromine	+	+
Hydrochloric acid	+	+
Hydrofluoric acid*	+	-
Hydrogen peroxide	-	+
Nitric acid	+	+
Perchloric acid	+	+
Phosphoric acid	+	+
Sodium hydroxide, 30%	+	-
Sulfuric acid	+	+
Water	+	+

⁺ suitable - not suitable

The above recommendations reflect testing completed prior to publication. Always follow instructions in the operating manual of the instrument as well as the reagent manufacturer's specifications. Should you require information on chemicals not listed, please feel free to contact BRAND. Status as of: 0713/2

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Hydrofluoric acid reacts slightly with sapphire resulting in mildly elevated aluminum values. To reduce these values we recommend discarding 3-5 dispensings of 2 ml each before performing the analysis.



Ordering Data

Dispensette® TA, Analog-adjustable

Items supplied:

Each Dispensette® TA bottle-top dispenser is conformity certified and supplied with performance certificate, telescoping filling tube, SafetyPrime™ recirculation valve and recirculation tube (optional), mounting tool, bottle adapters GL 28/S 28 (ETFE), GL 32 (ETFE) and S 40 (PTFE).

Capacity ml	Valve spring	A* ≤ %	± µl	CV* :	≦ µl	without SafetyPrime™ recirculation valve Cat. No.	with SafetyPrime™ recirculation valve Cat. No.
1-10	Platinum-iridium	0.5	50	0.1	10	4740 040	4740 041
1-10	Tantalum	0.5	50	0.1	10	4740 240	4740 241

^{*} Calibrated to deliver (TD, Ex). Error limits according to the nominal capacity (= maximum volume) indicated on the instrument, obtained with instrument and distilled water at equilibrium with ambient temperature at 20 °C, and with smooth, steady operation. The error limits are well within the limits of DIN EN ISO 8655-5. Conformity certified to DIN 12600. A = Accuracy, CV = Coefficient of variation

Accessories and Spare Parts

(Other spare parts and accessories can be found in the operating manual.)

SafetyPrime™ recirculation valves

Pack of 1.

Valve spring, Platinum-iridium

Cat. No.	7060 86
Valve spring, Tantalum	
Cat. No.	7060 87



Discharge tubes with integrated valve

Tube closure cap PTFE. Pack of 1.

Nominal volume ml	Valve spring	Length mm	Cat. No.
10	Platinum-iridium	90	7079 55
10	Tantalum	90	7079 56

Flexible discharge tubing

with safety handle. Must not be used with HF! Pack of 1.



Nominal volume ml	Valve spring	Cat. No.
10	Platinum-iridium	7079 45
10	Tantalum	7079 46

Telescoping filling tubes

FEP. Adjusts to various bottle heights. Pack of 1.

Length mm	Cat. No.
70-140	7042 02
125-240	7042 03
195-350	7042 08
250-480	7042 01



Filling valve with sealing washer

Pack of 1.

Cat. No. 6622



Dispensing cartridge with safety ring

Nominal volume 10 ml, calibrated, incl. quality certificate. Pack of 1.

Cat. No. 7075 42



Bottle Stand

PP. Full plastic construction suitable for use in aggressive environment (e.g., acid fumes in the hood). Support rod 325 mm, base plate 220 x160 mm, weight 1130 g. Pack of 1.



