

# Liquid Handling catalog



Liquid Handling

 made  
in  
Germany

DIN EN ISO  
DE-M



Witeg Labortechnik GmbH is one of the **leading manufacturers** and suppliers of **laboratory glassware, custom-built glassware, liquid handling articles, electronic witeg instruments and equipment.**

Witeg Labortechnik GmbH was founded in the year 1960 to develop glass devices. Nowadays, we can offer beside glass articles almost everything for the laboratories. The products fulfil the very high demands in the chemical, pharmaceutical and medical sectors and are delivered to **more than 100 countries worldwide.** Our actual product range covers **more than 30.000 products** which are **mostly ex stock** available.



Our company`s philosophy is preliminary **quality for the customer.** The **quality management system** of witeg Labortechnik has been officially **certified** already in 1994 by the **DIN EN ISO 9001** to guarantee the highest international quality standards. We permanently perform investment in qualified and engaged employees to reach the optimum level of quality. Furthermore, we emphasize to make use of latest computer-aided equipment and technique which is necessary to obtain best performance and utmost quality.



# Bottle-top digital burette CLASS A - PRECISION

# TITREX

The digital burette **TITREX** is ideal for a fast and sensitive titration “drop by drop”. One instrument simulates all volumes up to 99.99 ml. Moreover, titration is possible without any loss of reagent! From air-purging, necessary for a precise titration, to disassembly of the burette in the end of the titration – the reagent, that is not needed for the titration flows back into the bottle! **TITREX**’s accuracy and precision are of highest quality. Our error ranges are better than those required by ISO 8655-3. The memory function allows saving of up to 1000 values, which can be transferred to a PC and read using the included software.



Digital display

Handwheel

Fine adjustment - with an additional knob the desired amount can be easily titrated or dispensed more precisely



only available with fine adjusted version

Reset button / Calibration button

**TIT-Button: Titration mode**

**DOS-Button: Dosing / Dispensing mode**

**MEM-Button: Storage of data**

The displayed value can be stored in the internal memory. This memory can be readout with the provided software and interface cord (RS232).

Discharge tube with protective sleeve

- 0° dosing and titration mode
- 90° air-purging mechanism in a closed circuit
- 180° rest position 100% drip-free

Liquid Handling



# One instrument for all your titration and dosing applications

## CLASS A - PRECISION



### Quick and precise volume setting

The dispensing and titration volume can be set by turning the handwheels.

The mode can be changed by pressing „DOS“ respectively „TIT“.

The display shows the emitted volume („TIT“ mode) respectively the filled volume („DOS“ mode).

### Perfect air-purging mechanism for 0% reagent loss

Turn the discharge tube at 90°.

Remove (purge) trapped air in a closed circuit without reagent loss by turning the handwheels. The reagent flows back into the bottle!

After turning the handwheel 2 - 3 times the digital burette is free of air and ready to use.

This special feature helps not only to save residual reagent but also when accidentally setting the wrong volume!



### 360°-turn for your added safety

No matter how much you tighten **TITREX**, you can always redirect the discharge tube by simply turning the valve block to the desired position. This way the label of the bottle is always visible.

This feature works for all our adapters. Adapters for different bottle threads can remain on the bottle.

### 100% drip-free system for your safety

By turning the discharge tube at 180° all liquid flows back into the bottle. **TITREX** is completely closed and no accidental discharge can occur by inadvertently moving the handwheels.

There is absolutely no dripping possible!



### “Do-it-yourself” recalibration for a long life time

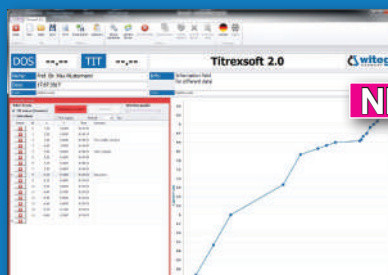
If you use **TITREX** as a measuring device in conformity to ISO 9001 and GLP, you need to control and monitor its accuracy and reliability. Therefore you can easily recalibrate the value by pressing „CAL“ until the display shows „CAL“. With the buttons „+“ and „-“ you can now adjust and correct the value.

**TITREX** can also be adjusted to liquids with other density and viscosity.

**TITREX** can also be recalibrated with the included **TITREXSOFT**.

### TITREXSOFT

Included in scope of supply



Through the access to the **TITREX**' memory, all data can be transferred to a PC – no more transmission errors!

The completely new developed software helps to process the stored data. Saved values can be read-out in real-time during the titration process or afterwards. Via the protocol export function, the data together with the automatically created graph can be either printed or saved.





One instrument  
for all volumes

## Digital burette

### Your advantage at a glance:

- high quality precision instrument, made in Germany
- highest accuracy and precision, our error ranges are better than the DIN EN ISO 8655-3 requirements
- resistant against most acids and alkalis
- 0% loss of reagent - air-purging & draining in a closed circuit
- 360° rotatable valve block for your added safety
- two-in- one instrument: dosing & titration
- covers the complete volume range up to 50 ml when used as a dispenser and up to 99.99 ml when used as a burette
- easy and precise volume setting
- vertical valves: no sedimentation, no contamination
- 100% drip-free by turning the cannula at 180°
- no transcriptions errors due to automatic value storage and the possibility of transferring values to a PC via RS232 interface (USB adapter optional available)
- calibration: standard with water of 20°C
- software enables saving the next calibration date
- recalibration for liquids of different viscosities possible
- suitable for the determination of acid content in milk
- easy to dismantle & to clean, valve block autoclavable at 121°C
- automatic power-cut-off after three minutes
- including NiMH 1,2V 2100mAh battery
- individual certificate, CE label and serial number
- DE-M marked according to the German calibration law



Zero loss of reagent

Type	Volume ml	witeg		ISO 8655-3		Order number
		Systematic errors ± ml	Random errors ≤ ml	Systematic errors ± ml	Random errors ≤ ml	
TITREX eco*	0-50	0.10	0.05	0.1	0.05	5 497 050 E
TITREX premium	0-50	0.03	0.01	0.1	0.05	5 497 050
TITREX premium fine adjustment	0-50	0.03	0.01	0.1	0.05	5 497 150

### Scope of supply

TITREX, suction tube, discharge tube, instruction manual, individual certificate, serial number, battery charger with EU and US adapter, software TITREXSOFT\*, RS232 interface cord\*, thread adapter A25, A28, GL 32/45, S40

\* TITREXSOFT and RS232 interface cord not included in the scope of supply of TITREX economy

### Parts in contact with reagent:

The components having direct contact with the reagent are made of chemical resistant materials: platinum spring, ceramic valve balls, PTFE piston, borosilicate glass 3.3 cylinder, borosilicate glass 3.3 valve

Optional accessories for TITREX and general titration applications

Type	Order number
TITREXSOFT (in scope of supply of digital burette Titrex) supports all manual titration applications, automatic graph creation, protocol export function, access to digital burette Titrex memory	<b>NEW DEVELOPED</b> 5 497 900
RS232 to USB adapter To connect the RS232 interface cord with an USB port	5 497 920

# Spare parts & Accessories

Bottles made of amber soda-lime glass with thread and plastic coating

Volume ml	Thread GL	Width x Height mm	suitable for	Order number
100*	28	Ø51x100	MINISPENSOR	5 372 128
100	32	50x125	LABmax, TITREX	5 372 101
250	32	65x160	LABmax, TITREX	5 372 025
500	32	80x195	LABmax, TITREX	5 372 050
1000	45	95x230	LABmax, TITREX	5 372 100
2500	45	Ø140x230	LABmax, TITREX	5 372 250

\*100ml & 2500ml bottle with round shape

Bottle made of borosilicate glass 3.3 with threads, plastic coating and screw cap

- straight neck GL 45 (closed screw cap)
- lateral neck GL 18 (screw cap with bore 11mm)

Volume ml	Thread GL	Ø x Height mm	suitable for	Order number
2000	45	Ø136x265	LABmax, TITREX	5 372 300

Standard joint adapters, made of borosilicate glass 3.3

Thread GL	Cone ST	suitable for	Order number
32	19/26	LABmax, TITREX, MINISPENSOR	0 550 029
32	24/29	LABmax, TITREX, MINISPENSOR	0 550 030
32	29/32	LABmax, TITREX, MINISPENSOR	0 550 031
45	29/32	LABmax, TITREX, MINISPENSOR	0 550 040
45	45/40	LABmax, TITREX, MINISPENSOR	0 550 041

Flexible discharge tube, coiled, with protective sleeve, made of FEP / PP

Length cm	Outer Ø mm	Inner Ø mm	suitable for	Order number
180	3.0	2.0	LABmax 2.5-10 ml	5 375 002
180	6	4	LABmax 25-100 ml, TITREX	5 375 012

Discharge tube with protective sleeve, made of FEP / PP

Length mm	Type	Nominal volume	suitable for	Order number
80	bent	2.5-10 ml	LABmax	5 375 003
120	bent	25-100 ml	LABmax	5 375 004
120	bent with fine tip	25-100 ml	TITREX	5 497 400
	bent with fine tip	100-2000 µl	MINISPENSOR	5 372 755



# Spare parts & Accessories

Filling tubes made of FEP

Length x Ø mm	suitable for	Order number
Telescopic 170-330 x 4	<b>NEW</b> LABmax 2.5-10 ml	5 375 000 TK
Telescopic 170-330 x 6	<b>NEW</b> LABmax 25-100 ml, TITREX	5 375 001 TK
310 x 5	LABmax 2.5-10 ml	5 375 000 N 310
390 x 5	LABmax 2.5-10 ml	5 375 000 N 390
310 x 7	LABmax 25-100 ml, TITREX	5 375 001 310
390 x 7	LABmax 25-100 ml, TITREX	5 375 001 390
	MINISPENSOR 50-100 µl	5 375 004 M
	MINISPENSOR 100-2000 µl	5 375 014



Thread adapters made of PP

Thread GL	suitable for	Order number
A22	LABmax, TITREX, MINISPENSOR	5 377 022
A25	LABmax, TITREX, MINISPENSOR	5 377 025
A28	LABmax, TITREX, MINISPENSOR	5 377 028
A30	LABmax, TITREX, MINISPENSOR	5 377 030
A32 / A28*	MINISPENSOR	5 377 032
A38	LABmax, TITREX, MINISPENSOR	5 377 038
A40	LABmax, TITREX, MINISPENSOR	5 377 040
A45 / A32**	LABmax, TITREX	5 497 600
A45	LABmax, TITREX, MINISPENSOR	5 377 045



\* from A28 to 32 (MINISPENSOR)  
\*\* from A45 to A32 inverted

## Additional accessories

Check valve with plastic coating

For fuming and smelling liquids like linoleum, bromine etc.

suitable for	Order number
LABmax, TITREX	5 377 300



Calcium chloride tube with plastic coating

Protection against moisture from the outside

suitable for	Order number
LABmax, TITREX	5 377 310*



One-way filter made of PP,

With membrane made of regenerated cellulose (dust and bacteria filter)

Pore size	Filter Ø	Pieces / packaging unit	suitable for	Order number
0.2 µm	13 mm	100	LABmax TITREX	8 212 001
0.2 µm	30 mm	100		8 212 002
0.45 µm	13 mm	100		8 212 003
0.45 µm	30 mm	100		8 212 004
0.45 µm	30 mm	50 individual sterile packed		8 214 001
0.2 µm	30 mm	50 individual sterile packed		8 214 002



\* delivered without calcium chloride

If undelivered please return to below address

Book Post



## Scientific Research Instruments Company Private Limited

# 42-43, 2nd & 3rd Floor, 1st Cross, Gubbalala, Bengaluru - 560 061

Telephone : 080 4757 2577 | 080 4302 5791

### Sales

info@srico-labworld.com

Mobile : +91 9900674407

### Service

service@srico-labworld.com

Mobile : +91 9900055879

**Bhubaneswar | Hyderabad | New Delhi | Navi Mumbai | Vadodara**

Ahmedabad | Chandigarh | Chennai | Goa | Guwahati | Kolkata | Lucknow | Pune | Thiruvananthapuram | Visakhapatnam



www.srico-labworld.com