

LABSOLUTIONS

# **DKL** Digesters Series

Fully Automatic Digestion Units



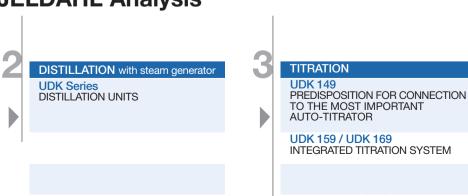
The digester is a widely used instrument in laboratories performing analysis for diversified applications in food&feed, beverage (nitrogen, protein, Total Kjeldahl Nitrogen), environmental (COD, Total Kjeldahl Nitrogen), chemical and pharmaceutical (organic nitrogen) industries. DKL digesters work in accordance with a variety of Standards (such as AOAC, ISO, EPA, DIN etc.).

### Can be connected to **DKL Fully Auto Digesters** Series Digesters : PC Once again, VELP leads the way with an Unmatched Offer. \_\_\_\_\_ A complete package providing Innovation, Savings and Quality. Automatic A product designed with your needs in mind. The new series of DKL digesters is the key to achieving your objectives ... BKL 35% Reduction in Energy Consumption reducing CO2 emissions and cutting costs. Saves 0.95 kWh per Auto Suction Cap prevents the emission of fumes into the lab. analysis. I COM 01 - Milk and derived products 420 ·c Auto Lift to reduce manual handling and increase 150-250 - 350 user-safety. Skip Pause User-Friendly: with a Graphic Display allowing the user to monitor every stage of analysis; wide selection of languages. Compact Profile: thanks to a narrower footprint, saving valuable bench space. DKL, for extremely reliable analyses **Features and Benefits** Fully Automated for Unsupervised Digestion

- Eco-friendly
- Rapid Heating
- Safe
- Extremely Compact -Versatile

## **VELP Solution for KJELDAHL Analysis**

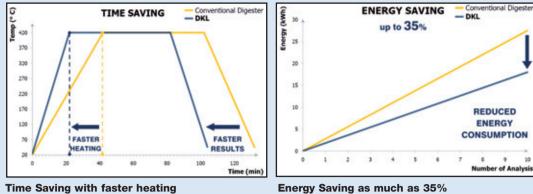
	SAMPLE
	$\overline{}$
	DIGESTION
	DKL Series / DK Series DIGESTERS
I	JP RECIRCULATING WATER PUMP
	SMS SCRUBBER



NITROGEN mg (Protein %)



TEMS technology saves Time, Energy, Money and Space



Time Saving with faster heating

**DKL 20** 



8x250 ml

DKL 8

**DKL 12** 

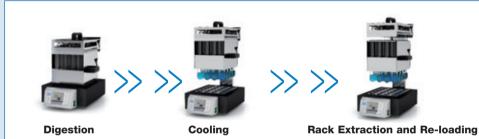


20x250/400 ml

Microkjeldahl tubes (100 ml) are suitable for samples with a high nitrogen/protein content, 250 ml for standard Kjeldahl digestion and Jumbo tubes (400 ml) for samples with a low nitrogen/protein content.

Microkjeldahl tubes need a dedicated system (heating block, rack and suction cap). Jumbo tubes need only a dedicated rack.

#### Fully Automated and Unsupervised Digestion in 3 Steps



High performance and high reliability during sample preparation for Kjeldahl Analysis



"SMS" Unit is designed for the neutralization of toxic and corrosive fumes coming from oxidative mineralization or other processes. Highly efficient

- Usable for both Basic and Acid Neutralization
- Safe and Practical to Use



"JP" Unit is the innovative recirculating water pump for aspirating fumes. Two operating mode selections. Automization and Optimization of the Suction Power Reduced Water Consumption

Abatement of Emissions

**Fields of Application** 

The DKL Series is suitable for a variety of applications including the determination of nitrogen, protein, COD, TKN etc. in accordance with official methods.



Food, feed and beverage industry



Environmental industry



Pharmaceutical and chemical industry



42x100 ml

INSTRUMENT	POWER SUPPLY	CODE No
DKL 8	230 V / 50-60 Hz	S30100200
DKL 8	115 V / 50-60 Hz	S30110200
DKL 12	230 V / 50-60 Hz	S30100190
DKL 12	115 V / 50-60 Hz	S30110190
DKL 20	230 V / 50-60 Hz	S30100210
DKL 42/26	230 V / 50-60 Hz	S30100180

#### SUPPLIED WITH





Sample rack

 Lin
 Automotion

 Code for DKL 8
 A00000170

 Code for DKL 12
 A00000176

 Code for DKL 20
 A00000167

 Code for DKL 42/26
 A00000167



(j)

DKL DIGESTION UNITS SERIES

Suction cap and drip tray

 Code for DKL 8
 A00000175

 Code for DKL 12
 A00000174

 Code for DKL 20
 A0000169

 Code for DKL 42/26
 A00000179

Code for DKL 8 Code for DKL 12 Code for DKL 20 Code for DKL 20 Code for DKL 42/26 A00000180



#### Test tubes

 Code for DKL 8
 A00000144

 Code for DKL 12
 A00000144

 Code for DKL 20
 A00000144

 Code for DKL 20
 A00000144

 Code for DKL 42/26
 A00000146

#### **OPTIONAL ACCESSORIES**

CODE No

DKL 8 Sample rack	A00000173
DKL 12 Sample rack, 250 ml tubes	A00000172
DKL 20 Sample rack	A00000168
DKL 42/26 Sample rack	A00000180
DKL 8 Suction cap and drip tray	A00000175
DKL 12 Suction cap and drip tray	A00000174
DKL 20 Suction cap and drip tray	A00000169
DKL 42/26 Suction cap and drip tray	A00000179
DKL 8 Stand for sample rack	A00000184
DKL 12 Stand for sample rack	A00000183
DKL 20, DKL 42/26 Stand for sample rack	A00000182
DKL 8, DKL 12, DKL 20 Test tubes Ø 42x300 mm,	
250 ml (3pcs/box)	A00000144
DKL 42/26 Test tubes Ø 26x300 mm, 100 ml (6pcs/box)	A00000146
DKL 12, DKL 20 Test tube Ø 50x300 mm, 400 ml	A00000185
DKL 12 Sample rack for test tubes 400 ml	A00000181
DKL 20 Sample rack for test tubes 400 ml	A00000246
DKL 8, 12, 20 Glass cap	A00000243
DKL 20 Sample rack for COD analysis	A00000237
DKL 20 Test tubes Ø42x200mm, 200 ml with cone	
NS 29/32 (3pcs/box) for COD analysis	A00000145
DKL 20 Air refrigerator with ground cone for COD analysis	A00001041
DKL 20 Antisplash bell for COD analysis	A00001045
DKL 20 PTFE sheaths for 29/32 cones for COD analysis	A00001042
USB cable A/B 1,8 m	10003134
DKL IQ/OQ Manual	A00000186

Construction Material:	Stainless steel with chemical resistant coating
Lift and Suction Cap Control:	Automatic
Control System:	Microprocessor with LCD Graphic Display
Temperature Range:	Ambient to 450 °C / 842 °F
Temperature Stability:	± 0.5 °C
Temperature Precision:	± 0.5 °C
Set Temperature:	Digital Readout in °C, °F or K
Temperature Calibration:	Automatic
Program Library:	54 Program library, including 24 user-programmable memories
Temperature Ramping:	4 ramps per program
Time Selection:	1 to 999 Minutes - 1 Minute Steps
Countdown:	Digital Readout
Languages:	UK, I, E, F, RUS, CN + Additional downloadable
Interface:	USB
Run Completed Alert:	Visual and Acoustic Signal
Damaged Temperature Probe:	Automatic Detection and Alarm Message
Capacity:	DKL 8: 8 x 250 ml, DKL 12: 12 x 250 / 400 ml, DKL 20: 20 x 250 / 400 ml,
	DKL 42/26: 42 x 100 ml
Power:	DKL 8: 1150 W, DKL 12: 1500 W, DKL 20 and DKL 42/26: 2300 W
Overall Dimension in mm (in) (WxHxD):	DKL 8: 210x690x540 (8.3x27.2x21.3), DKL 12: 266x690x540
	(10.5x27.2x21.3), DKL 20 and DKL 42/26: 322x690x584 (12.7x27.2x23.0)
Overall Weight in kg (lb):	DKL 8: 19.7 (43.5), DKL 12: 23.3 (51.4), DKL 20: 30.8 (68.0),
0 0(1)	DKL 42/26: 33.5 (74.0)

#### Constant Commitment to Knowledge Development

Your authorized agent:

We reserve the right to make technical alterations

We do not assume liability for errors in printing, typing or transmission





VELP Scientifica srl Via Stazione 16 20865 Usmate (MB) Italy Tel +39 039 628811 Fax +39 039 6288120 inse@velp.it www.velp.com