



# DK Series

## Semi-Automatic Digestion Units

Versatile, safe and precise block digesters for Kjeldahl analysis



# Semi-Automatic Digesters

The DK Series consists of basic digestion blocks providing accuracy, high thermal homogeneity and minimum energy consumption. The DK Series digesters consist of six models to suit any laboratory need for Kjeldahl digestion, Chemical Oxygen Demand (COD) and Heavy Metals Trace Determinations.

## EXCELLENT ACCURACY AND REPEATABILITY

The aluminum heating block ensures high thermal homogeneity heating up to 450°C.

- Temperature selection with 1°C steps and a precision of  $\pm 0.2^\circ\text{C}$ .
- Heating block temperature stability of  $\pm 0.5^\circ\text{C}$ .

## ENERGY SAVINGS

The DK Series digesters guarantee fast temperature set point reaching, reducing the energy consumptions.

- Average 13% lower consumption compared to the previous models.

## SPACE SAVING DESIGN

Save valuable space under the fume hood with the VELP DK digesters. The design of the DK Series ensures minimum space requirement.

## INTUITIVE INTERFACE

The bright digital display provides maximum visibility and easy reading of the information.

- Supports the recording of up to 20 methods with 4 temperature ramps.
- Easy to use interface with 4 buttons.

## VERSATILITY

All models DK models are available with tubes and all necessary parts to operate.

- Wide range of accessories is available to match analytical requirements.
- Genuine consumables to digest efficiently the samples.



### TEMS™ Technology

Save Time, Energy, Money and Space.



## VELP SOLUTIONS FOR KJELDAHL ANALYSIS

### SAMPLE



### 1 DIGESTION

DKL SERIES / DK SERIES  
DIGESTERS

JP  
RECIRCULATING WATER VACUUM PUMP

SMS  
SCRUBBER

### 2 DISTILLATION

UDK SERIES  
DISTILLATION UNITS

### 3 TITRATION

UDK 149  
CONNECTIVITY TO EXTERNAL TITRATION  
SYSTEMS

UDK 159 / UDK 169  
INTEGRATED COLORIMETRIC TITRATION  
SYSTEM



**NITROGEN mg (Protein %)**

# Configurations



DK 6

6 positions for 250 ml test tubes Ø 42 mm



DK 6/48

6 positions for 300 ml test tubes Ø 48 mm



DK 8

8 positions for 250 ml test tubes Ø 42 mm



DK 18/26

18 positions for 100 ml test tubes Ø 26 mm



DK 20

20 positions for 250 ml test tubes Ø 42 mm



DK 42/26

42 positions for 100 ml test tubes Ø 26 mm

## VELP Recommendation

In order to remove hazardous and noxious gases and vapors generated during the digestion process, every digester should be combined with a SMS Scrubber and a JP Pump to prevent potential damage to the digester and surrounding equipment.

### SMS SCRUBBER



**SMS SCRUBBER** is designed for the neutralization of toxic and corrosive fumes coming from digestion.

- HIGHLY COMPACT AND EFFICIENT
- USABLE FOR BOTH BASIC AND ACID NEUTRALIZATION
- SAFE AND ROBUST

### JP PUMP



**JP WATER VACUUM PUMP** is an innovative and reliable recirculating water pump for aspirating fumes with dual operating modes.

- AUTOMATION AND OPTIMIZATION OF VACUUM POWER
- REDUCED WATER CONSUMPTION
- HIGH EFFICIENCY

## INSTRUMENT - CODE

	POWER	SYSTEM	INSTRUMENT
DK 6	230 V / 50-60 Hz	S30100400	F30100400
	115 V / 50-60 Hz	S30110400	F30110400
DK 6/48	230 V / 50-60 Hz	S30100410	F30100410
	115 V / 50-60 Hz	S30110410	F30110410
DK 8	230 V / 50-60 Hz	S30100420	F30100420
	115 V / 50-60 Hz	S30110420	F30110420
DK 18/26	230 V / 50-60 Hz	S30100430	F30100430
	115 V / 50-60 Hz	S30110430	F30110430
DK 20	230 V / 50-60 Hz	S30100440	F30100440
DK 42/26	230 V / 50-60 Hz	S30100450	F30100450

## OPTIONAL ACCESSORIES

Glass cap	A00000243
Air condenser with ground cone	A00001041
PTFE sheaths for 29/32 cones	A00001042
Antisplash bell	A00001045
Stand for DK6-DK6/48	A00000397
Stand for DK-DKL8 DK18/26	A00000184
Stand for DKL-DK20, DKL-DK42/26	A00000182
Adapter for probe Ø3 mm for DK-DKL-ECO	A00000362
TMD6 Mineralization System	A00000409
Sample rack for COD DK6	A00000408
Sample rack for COD DKL20-DK20	A00000237
Test tube COD Ø42x200 mm 200 ml, 3 pcs/box	A00000145
IQ/OQ DK Manual	A00008338
KjTabs VCM - 1000 pcs/box	A00000274
KjTabs VKPC - 1000 pcs/box	A00000275
KjTabs VCT - 1000 pcs/box	A00000276
KjTabs VST - 1000 pcs/box	A00000277
KjTabs VTCT - 1000 pcs/box	A00000281
KjTabs VW - 1000 pcs/box	A00000282
KjTabs VS - 1000 pcs/box	A00000283
Weighing boats 58x10x10 mm, 100 pcs/box	CM0486000
Weighing boats 70x23x15 mm, 100 pcs/box	CM0486001

## SUPPLIED WITH THE SYSTEM



SUPPORT SYSTEM

DK 6	A00000191
DK 6/48	A00000191
DK 8	A00000191
DK 18/26	A00000191
DK 20	A00000190
DK 42/26	A00000190



SAMPLE RACK

DK 6	A00000395
DK 6/48	A00000398
DK 8	A00000173
DK 18/26	A00000400
DK 20	A00000168
DK 42/26	A00000179



SUCTION CAP AND DRIP TRAY

DK 6	A00000396
DK 6/48	A00000399
DK 8	A00000175
DK 18/26	A00000401
DK 20	A00000169
DK 42/26	A00000180



TEST TUBES

DK 6	A00000144
DK 6/48	A00001088
DK 8	A00000144
DK 18/26	A00000146
DK 20	A00000144
DK 42/26	A00000146

## FIELDS OF APPLICATION

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

FOOD, FEED AND BEVERAGE INDUSTRY

ENVIRONMENTAL INDUSTRY

PHARMACEUTICAL AND CHEMICAL INDUSTRY

# TECHNICAL DATA

	DK 6	DK 6/48	DK 8	DK 18/26	DK 20	DK 42/26
CONSTRUCTION MATERIAL	Epoxy painted with chemical resistant coating	Epoxy painted with chemical resistant coating	Epoxy painted with chemical resistant coating	Epoxy painted with chemical resistant coating	Epoxy painted with chemical resistant coating	Epoxy painted with chemical resistant coating
TEMPERATURE RANGE	Ambient to 450 °C / 842 °F	Ambient to 450 °C / 842 °F	Ambient to 450 °C / 842 °F	Ambient to 450 °C / 842 °F	Ambient to 450 °C / 842 °F	Ambient to 450 °C / 842 °F
STABILITY OF THE HEATING BLOCK TEMPERATURE	± 0,5 °C	± 0,5 °C	± 0,5 °C	± 0,5 °C	± 0,5 °C	± 0,5 °C
PRECISION OF THE HEATING BLOCK TEMPERATURE	± 0,5 °C	± 0,5 °C	± 0,5 °C	± 0,5 °C	± 0,5 °C	± 0,5 °C
SET TEMPERATURE	Digital readout in °C or °F	Digital readout in °C or °F	Digital readout in °C or °F	Digital readout in °C or °F	Digital readout in °C or °F	Digital readout in °C or °F
TEMPERATURE CALIBRATION	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
SELECTABLE RAMPS	Up to 4 per program	Up to 4 per program	Up to 4 per program	Up to 4 per program	Up to 4 per program	Up to 4 per program
DIGESTION TIME RANGE	1 to 999 minutes	1 to 999 minutes	1 to 999 minutes	1 to 999 minutes	1 to 999 minutes	1 to 999 minutes
TIME SELECTION	1 minute steps	1 minute steps	1 minute steps	1 minute steps	1 minute steps	1 minute steps
COUNTDOWN	Digital readout	Digital readout	Digital readout	Digital readout	Digital readout	Digital readout
SELECTABLE LANGUAGE	EN, IT	EN, IT	EN, IT	EN, IT	EN, IT	EN, IT
HEATING PLACES	6-position	6-position	8-position	18-position	20-position	42-position
SIZE OF TUBES	250 ml test tubes (Ø 42 mm)	300ml test tubes, Ø 48 mm	250 ml test tubes (Ø 42 mm)	100 ml test tubes, Ø 26 mm	250 ml test tubes (Ø 42 mm)	100 ml test tubes, Ø 26 mm
POWER	1000 W	1000 W	1150 W	1150 W	2300 W	2300 W
WEIGHT	9 kg (35.7 lb)	9 kg (35.7 lb)	11 kg (24.2 lb)	11 kg (24.2 lb)	18 kg (39.7 lb)	18 kg (39.7 lb)
DIMENSIONS (WxHxD) (aluminum block only)	220x140x350 mm (8.7x5.5x13.8 in)	220x140x350 mm (8.7x5.5x13.8 in)	230x690x420 mm (9.1x17.2x16.5 in)	230x690x420 mm (9.1x17.2x16.5 in)	330x140x510 mm (13.0x5.5x20.1 in)	330x140x510 mm (13.0x5.5x20.1 in)



## SERVICE & SUPPORT

VELP Scientifica products are designed by our engineers to resist years of laboratory use.

Our products are manufactured with premium materials to guarantee the best performance with maximum safety.

According to our experience, a proper and regular maintenance is necessary to ensure the highest performance of analytical instrument. VELP Service Department and VELP Official Partners are always ready to offer you maintenance and service support tailored to your needs.

### GET THE SUPPORT YOU NEED CHOOSING THE OPTIONS:

- Installation
- Preventive Maintenance
- Help-desk and Remote support
- Technical Assistance
- Analytical Support
- Calibration Certification



We reserve the right to make technical alterations  
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VELP Official Partner

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