

# ViscoSystem® AVS 270 – the automatic cleaning system

The automatic rinsing system AVS 270 replaces the proven rinsing automats AVS 24/26.

The used viscometer can be rinsed immediately after completion of the series of measurements or on demand. This has the advantage that the measured values can be examined first and the rinsing process started afterwards.

The modular construction of the AVS 270 allows the fast and easy exchange of system components.

The AVS 270 allows the usage of both detection systems (optical and thermal).



## Technical data AVS 270

Country of origin	Germany
Display	7-segment LED for status message
Mains connection	Connector in accordance with EN 60320
Pump connection	Socket outlet in accordance with EN 60320
Power supply	90 ... 240 V~, 50 ... 60 Hz complies with protection class 1 acc. to DIN 57 411, part 1 / VDE 0411, part 1
Protection class	IP 20 in accordance with EN 60 529
Power consumption	At 230 V [VA]: 100; at 115 V [VA]: 200
Data transmission	Bidirectional serial interface in accordance with EIA RS-232-C Baud rate: 4.800 Parity: no Word length: 7 Bit Stop bit: 2
Pneumatic connections	Threaded connections for viscometers and solvent
Dimensions	205 x 255 x 350 mm (H x W x D)
Weight	6 kg
Housing Material	Steel aluminium housing with chemically resistant 2-component coating, stackable
Keypad	Multi-color polyester foil
Ambient conditions	Ambient temperature: +10 ... 40°C (for operation und storage) Air humidity in acc. with DIN EN 61 010, part 1 Max. relative humidity 80 % for temperatures up to 31°C, declining linearly to 50 % relative humidity at a temperature of 40°C
Equipment safety	EMC in acc. with Council Directive 89/336/EWG; Low-voltage directive in acc. with Council Directive 73/23/EWG; as amended by Council Directive 93/68/EWG Examination based on EN 61 010

# Ordering information ViscoSystem® AVS 270

## The following viscometers can be employed:

- DIN Ubbelohde
- ASTM Ubbelohde
- TC Ubbelohde without rinsing tube
- Micro TC Ubbelohde without rinsing tube
- DIN Micro Ubbelohde
- Cannon Fenske routine
- Micro Ostwald

## Safety:

The vacuum operation guarantees optimum safety. The materials in contact with the permitted solvents are according to the highest requirements of a modern lab. The screwing caps for instance are made from PTFE, PCTFE, PP and PPS.

## Parameter:

No PC is required when an AVS 470 is used. The rinsing parameters can be set easily and comfortably via the PS2 keyboard of the AVS 470 or via the foil keypad of the AVS 270.

## Flexibility:

Standard-Viscometer according to DIN, ASTM and ISO can be employed. No viscometers of special forms (i.e. with threads or special connections) are required.

## ViscoSystem® AVS 270

The automatic rinsing system AVS 270 is composed of individual components, which must also be ordered separately. Please always request a detailed offer.

### Description

Description	Order No.
ViscoSystem® AVS 270 basic unit for connection to viscosity measuring device	28 541 5697
ViscoSystem® AVS 470 (Scope of delivery: All necessary connection tubes/cables and solvent bottles)	

### Accessories

Vacuum pump VZ 8630, 230V/50Hz	105 7901
Vacuum pump VZ 8631, 115V/60Hz	105 7902

## Selecting the solvents:

Proven solvents are, e.g., alcohols, ketons, esters, chlorinated hydrocarbons, aliphatic and aromatic hydrocarbons. Make sure the boiling point of the selected solvent is appropriate to the temperature of the thermostatic bath. The first solvent should have the maximum possible solving power (detergence) and the boiling point should be at least 50° above the bath temperature.

The second solvent is used mainly to eliminate the first, high boiling point solvent and its temperature should be slightly higher than that of the thermostatic bath.

Exclusively organic solvents or aqueous solvents are used with non-corrosive characteristics in respect to glass, brass and stainless steel. Only such solvents

without solid components must be used. Otherwise there is a risk of contaminating the viscometer capillaries and valves.

When the according purity of the solvent cannot be guaranteed, it is recommended to use filters. A solvent that is now used will fulfil both requirements. It must be considered that the solvent temperature must not exceed the 80 °C.

Due to safety reasons it is not allowed to use any solvents with an ignition temperature of under 250°C. Regarding the solvent storage or disposal vessels it is authorized to use the standard laboratory bottles or customized vessels.