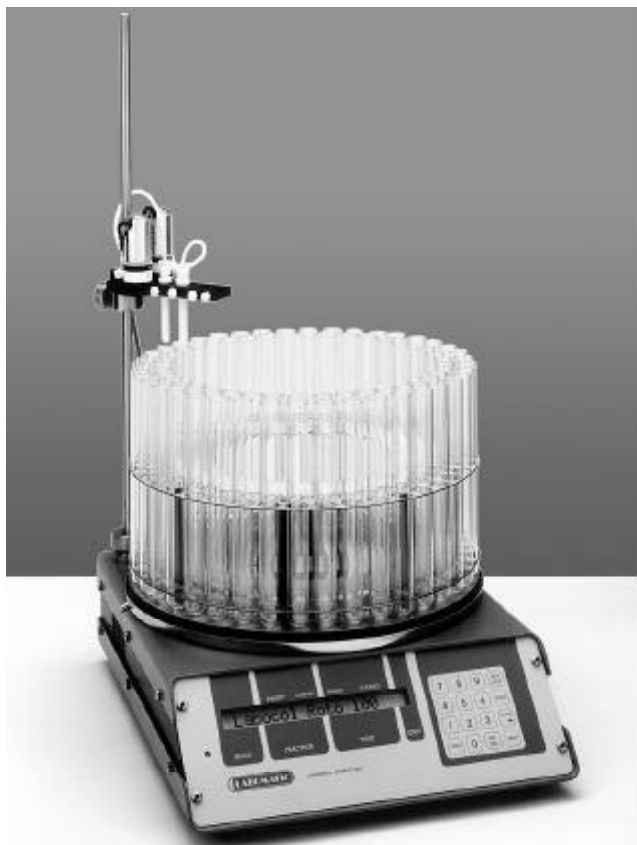


## LABOCOL Roto-100

### Applications

Compact, solvent resistant fraction collector with exchangeable racks and versatile utilization possibilities. Requires little place. Ideal for research and development, as well as for pilot plant or production.



### Special characteristics

- ▶ Inclined display with LCD-indication of the preset programme and of the current status
- ▶ Universal use through different racks
- ▶ Compact construction
- ▶ Collection of larger fractions in any desired vessels
- ▶ Control of externally connected instruments or valves
- ▶ Bar code scanning of the individual positions of the tubes, can also be modified subsequently
- ▶ Time control of 1 - 999 minutes or seconds
- ▶ External inputs: time-reset, manual, home hold, run/stop
- ▶ External outputs: marker, intermediate disconnection, final disconnection (110/220/24 volt, currentless contact) marker for final disconnection
- ▶ The actual program can be overwritten directly and implemented immediately
- ▶ Home-functions allow to start repeated runs at the same position or vial; can be connected to automatic sample injection systems
- ▶ Preset fraction number and preset fraction time always displayed

### Tubes and racks

The flexibility of the LABOCOL Roto-100 fraction collector is guaranteed by a wide range of exchangeable racks. These racks together with the collecting tubes can be taken off in single manual operation and attached again in the same easy way (bayonet lock).

The racks are made of stainless steel plate (DIN 1.4435). They are easy to clean and autoclavable. Due to good resistance to corrosion, no problem arises when working with organic solvents.

#### Micro rack

for use with 80 micro vials  
(OD 11 mm, length 80 mm, volume 7.5 ml)

#### Standard rack

for use with 80 standard vials  
(OD 18 mm, length 180 mm, volume 36 ml)

#### Preparative/large volume racks

for use with 20 preparative vials  
(OD 36 mm, length 170 mm, volume 140 ml)  
or for use with 20 large volume vials  
(OD 36 mm, length 285 mm, volume 240 ml)

#### 40-fold distribution ring

Allows the collection of big quantities in any desired vessel. The distribution ring is made of polyethylene. The 40 connections are adapted to tubing of ID 6-10 mm.

### Recommend options

#### Row change valve

This 3-way PTFE valves allow to run the LABOCOL Roto-100 with racks for one row (preparative or large volume vials) or with rack for two rows (micro or standard racks).

#### Flow break valve

Prevents columns running dry after termination of chromatography or losses of drops or substance during fraction change.

#### Expansion glass vessel

Allows the pump to run at flow rates up to 120 ml/min even when the flow break valve is closed. After opening the valve, the resulting overpressure empties the expansion vessel.

#### Drain ring

Avoids losses of substance or solvent when preparative/large volume racks are used at high flow rates. The drain ring is made of polypropylene and is simply placed on the tubes.

### Technical construction

#### Function and operation security

Modern electronics and high mechanical precision guarantee reliable running. Safety in continuous operation through security spillage tray. Change of fraction is initiated by an internal control pulse with the additional possibility of manual control.

No dry running columns through automatic internal or external final disconnection.

After having reached the preset number of tubes or the last tube, the LABOCOL Roto-100 disconnects itself and the instruments connected to it (e.g. pump, flow break valve, row-change valve). Automatic control of the row change valve by selected fraction mode. Automatic close of flow break valve during fraction change. Automatic drain control.

Automatic home function to reach the start position for repeated fraction mode.

Impulse input to the control through LABODIV-10, or LABODIV-100 peak detectors.

Signal given to mark fraction change on recorder.

**Versions with different fraction racks**

Following pictures show the different versions of the LABOCOL Roto-100 with the various racks. The micro and the standard rack can be used in 1-row or 2-row mode whilst the preparative/large volume rack can be used only in the 1-row mode.



Preparative/large volume rack for use of 20 large volume vials  
OD 36 mm, length 285 mm, volume 240 ml



Preparative/large volume rack for use of 20 preparative vials  
OD 36 mm, length 170 mm, volume 140 ml



Micro rack for use of 80 micro vials  
OD 11 mm, length 80 mm, volume 7,5 ml



Standard rack for use of 80 standard vials  
OD 18 mm, length 180 mm, volume 36 ml



40-fold distribution ring for collection of large volumes in any desired vessel  
40 connections for tubes with 6 - 10 mm ID



Drain ring to avoid loss of substance during use of preparative/large volume rack at high flow rates



LABOCOL Roto-100 with preparative/large volume rack and large volume vials

**Technical specification**

Step number control:	bar code of rack
Fraction mark:	currentless contact
Flow break valve:	2-way-PTFE-magnetic valve ID 2 mm, 24 V DC
Row change valve:	PTFE magnetic valve ID 2 mm, 24 V DC
Temperature range:	0 - 40°C
Materials of parts in contact with eluent:	PTFE (Teflon), glass
Control function by external signals:	Time-reset, home-position, run, stop
Internal control functions:	- preset fraction number - preset fraction time - fraction marker - final disconnection mark - intermediate disconnection during fraction change and final shut off by 110/220/24 Volt or currentless contact breaker
Time control:	1-999 minutes or seconds
Power supply:	110 V, 220 V, 50/60 Hz
Dimensions:	w x h x d (mm) 315 x 100 x 315
Weight:	5,4 kg

**Ordering information**

Articel No.	Description (application) (standard) (biocompatible)
0.251701.0	LABOCOL Roto-100 fraction collector without vials and racks, liquid connections according to choice 1/16" or 1/8"
0.250855.0	Row change valve to select between 1-row-or 2-row mode
0.250857.0	Flow break valve, ID 2.5 mm, 24 Volt, liquid connections according to choice 1/16" or 1/8"
0.245860.0	Expansion glass vessel, liquid connection according to choice 1/16" or 1/8"
0.250716.0	Drain ring in connection with preparative/large volume rack
0.251730.0	40-fold distribution ring complete with 40 tube adapters, rack and funnel with glass distribution tube
0.251706.0	Micro rack (OD 240 mm, height 80 mm) for 2 x 40 micro vials
0.245039.0	Micro vials, OD 11 mm, length 80 mm, (pkg of 100)
0.251705.0	Standard rack (OD 315 mm, height 100 mm) for 2 x 40 standard vials
0.245038.0	Standard vials, OD 18 mm, length 180 mm, (pkg of 100)
0.251712.0	Preparative/large volume rack (OD 300 mm, height 120 mm) for 1 x 20 preparative vials or for 1 x 20 large volume vials
0.245019.0	Preparative vials, OD 36 mm, length 170 mm, (pkg of 25)
0.245018.0	Large volume vials, OD 36 mm, length 285 mm (pkg of 25)