



*Büchi Laboratory autoclave, polyclave – the polyvalent  
Safe Pressure reactions with steel-  
and glass reactors*



- ☒ *safe*
- ☒ *versatile*
- ☒ *modular*
- ☒ *transparent*
- ☒ *efficient*
- ☒ *complete*
- ☒ *well designed*
- ☒ *innovative*
- ☒ *unique*
- ☒ *superior quality*

BÜCHI – THE WAY TO GET RESULTS!



Your safety matters to us!



## Safety fast acting closure

*Couldn't be easier to use!*

Release the pressure with the safety valve, release the clamp, open closure and that's it.

Function:

By putting the clamp in «open» position, the vessel descends slightly inside the closure. In this position, the reactor is open, but still attached inside the fast acting closure. After fully opening the closure, the reactor bottom can be lowered completely.

### Safety features

- The closure can only be opened after the pressure has been released
- It can only be opened completely, when the cover is separated from the cover plate

## Integrated poly carbonate front door

The rugged all welded frame is designed to prevent any danger for the operator in case of failure of a glass vessel. Yet the shatterproof poly-carbonate sliding door allows for observation of the process.

How about some color in your lab ?

The polyclave is available in red, blue, yellow, black or chrome.



# Change the vessel – not the entire system!

Available with fast acting closure or bolt-on closure

The polyclave is very versatile. As with its predecessors, various vessel types and sizes can be installed on the same cover plate.

## Bolt-on closure



Typ 1  
0,25/0,5/1,0/1,6/2,0 l  
max. 200°/6 (12) bar



Typ 2  
0,5/1,0/1,5/2,0/3,0\*/5,0 l\*  
max. 200°/6 (12) bar  
\*max. 200°/3 (5) bar



Typ 3  
0,5/1,0/2,0/3,0/5,0 l  
max. 250°/60 bar



Typ 4  
1,0/2,0/3,0/5,0 l  
max. 250°/60 bar

## Quick action closure



# Vessel handling made easy

## Lift

After fully opening the closure the vessel can be lowered easily by turning the handle located in front at the bottom of the frame.

The vessel is attached to the lift and can be removed (e.g. for cleaning) without the need for any tools.



polyclave with Type 4 vessel and fast acting closure



polyclave with Type 1B vessel and bolt-on closure



polyclave with mobile floor stand  
Type 2/5.0 liter vessel

# Which magnetic drive would you like?

## Stirrer drive

The new cyclone 300 solves any stirring problem. Consisting of a Servomotor with integrated magnetic coupling bmd 300 and a powerful digital controller cc 300.

### Features:

- Max. torque (300 Ncm) over the full range of agitator speed (0–2000 rpm)
- Constant speed, also with increasing viscosity
- Soft start of stirrer motor
- Precise speed/torque control with bds mc

### Alternatives:

- Stirrer drives cyclone 075/X-proof stirrer drive



cyclone 300



cyclone 075



Ex-Antrieb  
X-proof stirrer drive

## Coverplate with 7 openings

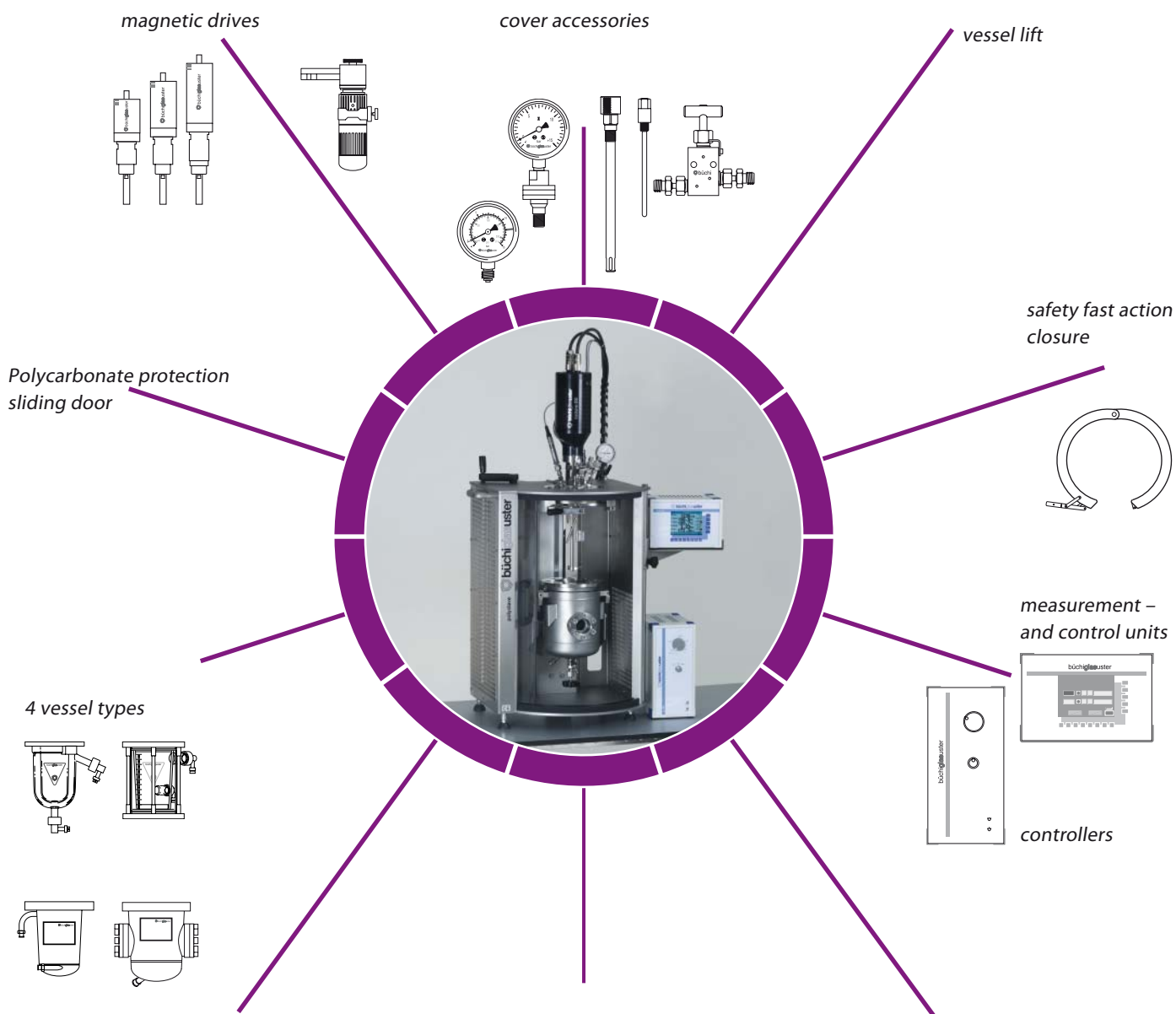
5 x 1/4" NPT, 1 x 3/8" NPT, 1 x 1/2" NPT  
including the following accessories:

- pressure gauge
  - Pt100
  - bursting disc
  - 2 valves
  - 2 plugs
- Options like burettes,  
sensors, etc...



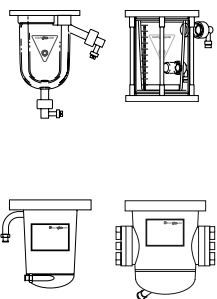
Cover plate assembly

# «polyclave» – the modular-system

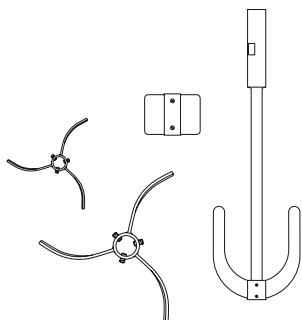


Polycarbonate protection sliding door

4 vessel types

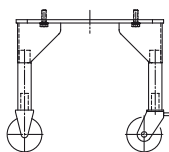


stirrers etc



Dimensions  
L x B x H [mm]  
L x W x H [mm]

mobile floor stand



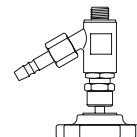
Benchtop model

530 x 800 x 1250

Floor model

530 x 800 x 1750

bottom valves



# Measuring, controlling, recording

...

## Measuring/controlling instruments

Various measurement and control devices are available:

*bds sc*  
1-channel measuring and control unit

*bds md*  
3-channel display unit

*bds mc*  
5-channel measuring and control unit

*bls 2 Software*  
Software for data acquisition and control of data from *bds sc*, *bds mc* and *bpc* hydrogenator



bds sc



bds md



bds mc



Software bls 2

# Overview and standard accessories

## Stirrers and Accessories

- Various stirrer shapes and Stirrer shafts
- Rupture disc, relief valve
- Sleeve with Pt100 or thermometer
- Gasinlet tube
- Pressure gauge/pressure transmitter
- Valves/bottom valves
- Burettes
- Sampling device
- Condensers (Reflux)
- Etc.



## Special executions

Special executions are our standard.  
We manufacture systems in Hastelloy, Titanium, Tantalum, Zirconium, etc., as well as pressure vessels for higher pressures and temperatures. Ask us!

## Overview Büchi Laboratory Autoclaves

For any temperature, any pressure, any size, ask Büchi.

Büchi Autoclaves	Temperature				Pressure bar/psi				Volume					Mat.				
	150° C	200° C	250° C	350° C	10/145	12/174	60/870	100/1450	350/5075	10-25 ml	100-300 ml	100-450 ml	0.25-3.0 l	0.25-5.0 l	1.0/2.0 l	5.0-20.0 l	Glas/ Glass	Inox/SS316L
tinyclave	●				●					●							●	●
miniclave	●				●						●						●	●
miniclave drive	●		●		●		●				●						●	●
ecoclave		●	●			●	●	●					●				●	●
polyclave		●	●			●	●	●					●				●	●
bep280		●	●			●	●	●					●				●	●
kiloclave			●			●	●	●							●		●	●
limbo				●				●				●					●	●
limbo li				●				●				●					●	●
limbo ls				●				●						●			●	●

Special execution on request.



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