

«miniclave» «inertclave» cyclone «i» Non-metallic pressure autoclaves



- Safe pressure reactions with glass vessels
- Wide application range due to consequent use of non-metallic materials on wetted parts
- Excellent corrosion resistance

no metal –
no problem

all wetted parts are
non-metallic



«inertclave» «inertclave»

Concept

- Pressure reactor with all product touched parts made of non-metallic materials (Borosilicate glass, PTFE, PFA, PEEK)
- Manufactured and tested according to PED, AD2000
- WxDxH 420x510x1000mm
- max. 6 bar / 180°C

Stand

- Stainless steel construction with polycarbonate safety screen

Stirrer drive

- Inert magnetic drive cyclone «i» 10...900 rpm

Vessels

- Type 1 / 1B / 1I / 1BI, 0.5 / 1.0 liter

Cover plate

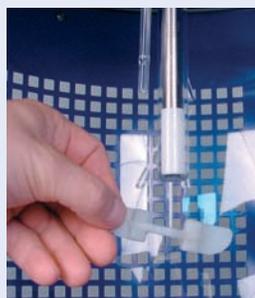
- with 6 openings:
4x ¼" NPT, 1x½" NPT,
1xPg13.5
- Setup: Manometer,
bursting disc, Pt100,
2 valves, 2 plugs



Cover plate with 6 openings and accessories made of PTFE, PFA, PEEK or glass



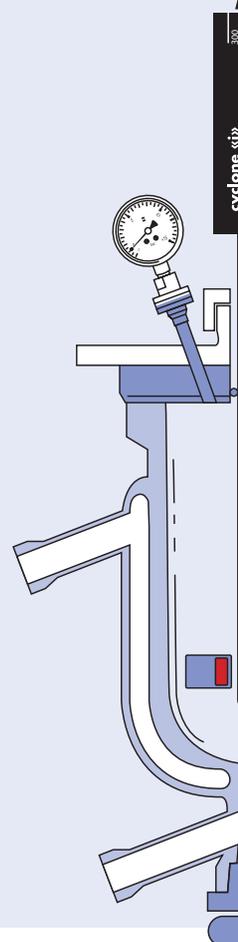
PEEK cover plate from inside with dip tube, Pt100-sensor and stirrer



Installation of stirrer on glass tube of magnetic drive cyclone «i»



Integrated motor with speed control



«miniclave»

Pressure reactor for small-scale experiments without agitator and heating jacket.
The instrument can be heated by a bath thermostat and stirred by using a magnet bar mixer.

Concept

- Pressure reactor with all product touched parts made of non-metallic materials (Borosilicate glass, PTFE, PFA)
- without stirrer drive, without heating jacket
- Manufactured and tested according to PED, AD2000
- WxDxH 160x110x270mm
- max. 10 bar / 100°C or 6 bar / 150°C

Vessels

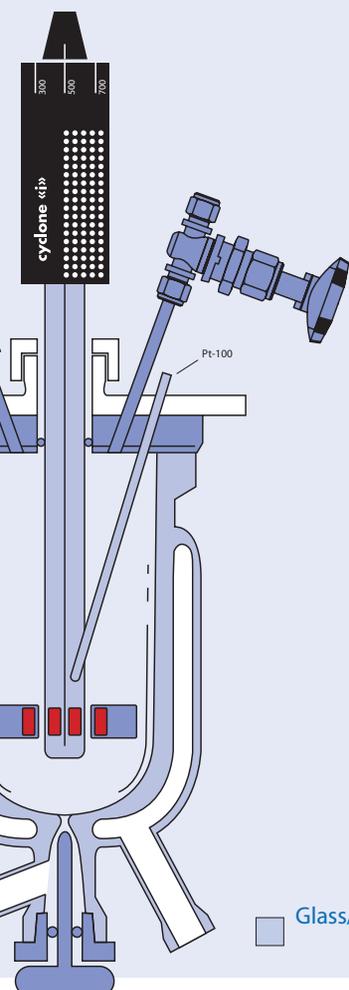
- Type 1, 100 / 200 / 250 / 300ml
- Vessel holder with protective mesh

Cover plate

- with 4 openings: 4x ¼" NPT
- Setup: Manometer, bursting disc, thermometer sleeve, valve



Interchangeable stirrer vessels



Type 1
Glass vessel with heating jacket,
without drain valve
0.5 / 1.0 l



Type 1B
Glass vessel with heating jacket and drain valve
0.5 / 1.0 l



Type 1I
Glass vessel with heating jacket and vacuum insulation jacket, without drain valve
0.5 / 1.0 l



Type 1BI
Glass vessel with heating jacket, drain valve and vacuum insulation jacket
0.5 / 1.0 l

Glass/Vessel/magnetic drive
 Internal magnet/External magnet
 PEEK/PTFE/PFA Stirrer/Cover plate/Accessories

cyclone «i» Magnetic drive made of glass and PFA

The unique design of this cyclone «i» is based on a magnetic coupling. The main difference from a traditional magnetic coupling is that the driving magnet is rotating inside the stationary glass tube and the paddle stirrer has the magnets on the outside. All wetted parts are made of glass, PTFE or PFA.

Applications

The cyclone «i» is for applications where conventional stirrer shaft glands or magnet bar stirrers cannot be used due to the high expectations for leak tightness or better mixing capabilities.

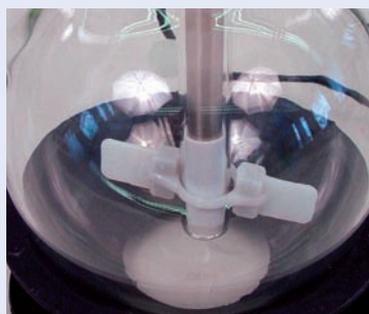
Technical data

| | |
|-------------------|---|
| Speed range | 10 to 900 Rpm stepless |
| Temperature range | -50 to +180°C |
| Pressure range | -1 to 0.5 bar with NS29/32 -1 to 6 bar with «inertclave» |
| Stirrable volume | max. 2.0 liter |
| Glass tube | L=270mm, Diam. 18mm |
| Stirrer | 2-Blade stirrer, PFA |
| Viscosity | max. 1500 cP |
| Power supply | 100 – 240 VAC, 50/60Hz |



Unpressurized application with round flask

The cyclone «i» can besides the application on the «inertclave» also be used for non-pressurized operation with standard laboratory glassware. It guarantees maximum operator safety with hermetically sealed vessels.



Installation of cyclone «i» with NS29/32 on round flask.



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