

THR type high pressure reactor with magnetic stirrer

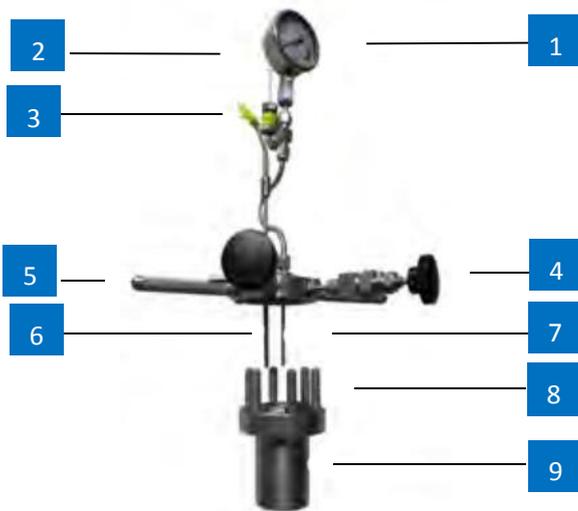
1.Application: Chemistry, Pharmaceutical, Macromolecule, Metallurgy, Environmental Protection,etc, chemical process areas. For instance: high pressure reaction, hydrogenation reaction, catalytic reaction, synthetic process, pharmaceutical synthesis, high pressure polymerization, nano synthesis, conditions screening, crystallization screening, combinatorial chemistry, biomass conversion, supercritical reaction, hydrothermal reaction, polymer synthesis, electrochemical corrosion testing, infrared detection,etc.

2.The maximum operating temperature of THR High Pressure Reactor is 250℃, use corrosive medium to do reaction, PTFE inner is optional, but its high temperature resistance is 180℃, so if the corrosive medium temperature is over 180℃, please choose other material reactors.

3.THR Series High Pressure Reactor adopt module heating method, which is quick heating and precise temperature control. THR series all are internal magnetic stirring, when magnetism arrive 300°, degaussing phenomenon will happen, so if operating in over 300° condition, please choose TOPTION MHR Series High Pressure Reactor.



Detail description



- 1.Pressure Gage - monitor working pressure in reactor.
- 2.Explosion Valve - Protect reator overpressure working.
- 3.Temperature Sensor Plug - monitor the temperature in reactor, connect with thermocouple.
- 4.Needle valve - air inflow, exhaust or sampling.
- 5.Handlebar - to teardown reactor lid.
- 6.Temperature measure jacket tube - used to insert temperature sensor.
- 7.Accused of bottom tube - used to sample during reaction.
- 8.Reactor lid lock screw - uniform distribution 6pcs in total, clockwise is tight, anticlockwise is loose.
- 9.Reactor body - coefficient of material charging is 80% of reactor whole volume, not suitable for all kinds of medium.

Rotary Evaporator

 Scraped Film Evaporator /
Short Path (Molecular)
Distillation System

 Chemical Glass
Reactor

 High Shear Homogen-
eous Emulsification
Reactor

 Pilot Ultrasonic
Emulsification Reactor

 Vacuum Filter / Glass
Liquid Separator

 Photochemical
Glass Reactor

 Hydrothermal
Synthesis Reactor

 High Pressure
Reactor

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1. Temperature display - display real time temp. when working.
2. Rotating speed display - display real time rotating speed during working.
3. Indicator lamp display - function indicator when working.
4. Temp & time set key [T-Set] - used to set temperature, timing, and parameters which is related with temperature & time.
5. UpKey - add key.
6. Down key and self set key - reduce key and self set key.
7. Lift key and check key - shift key and check working time & timing.
8. Speed set key - used to set speed and related parameters.
9. Working and stop key - start or stop working.



Technical specification

The stirring reactor laboratory miniature high-pressure reaction kettle

Model	THR50	THR100	THR250	THR500
Material capacity(L)	50ml	100ml	250ml	500ml
The working interface	Touch control liquid crystal display	Touch control liquid crystal display	Touch control liquid crystal display	Touch control liquid crystal display
The maximum operating temperature	250℃	250℃	250℃	250℃
The maximum operating temperature with PTFE Liner	180℃	180℃	180℃	180℃
Heating mode	Module heating	Module heating	Module heating	Module heating
The heating power	1.2KW	1.2KW	1.5KW	2.0KW
Stirring speed	0-1200rpm	0-1200rpm	0-1300rpm	0-1300rpm
Stirring method	The internal magnetic stirring	The internal magnetic stirring	The internal magnetic stirring	The internal magnetic stirring
The stirring power	40W	40W	40W	80W
The maximum working pressure	10Mpa	10Mpa	10Mpa	10Mpa
Materials of construction	SS316L (standard); (Alloy TA2, ALLOY C-276, Nickel ALloy, Zirconium materials are optional)			
PTFE liner	Optional			
Note:				
1. Max volume 2000ml could be customized.				
2. Suitable for the material which temp <250℃ and is nonmagnetic.				
3. Temperature timing set, temp. set when working, this function is optional.				

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