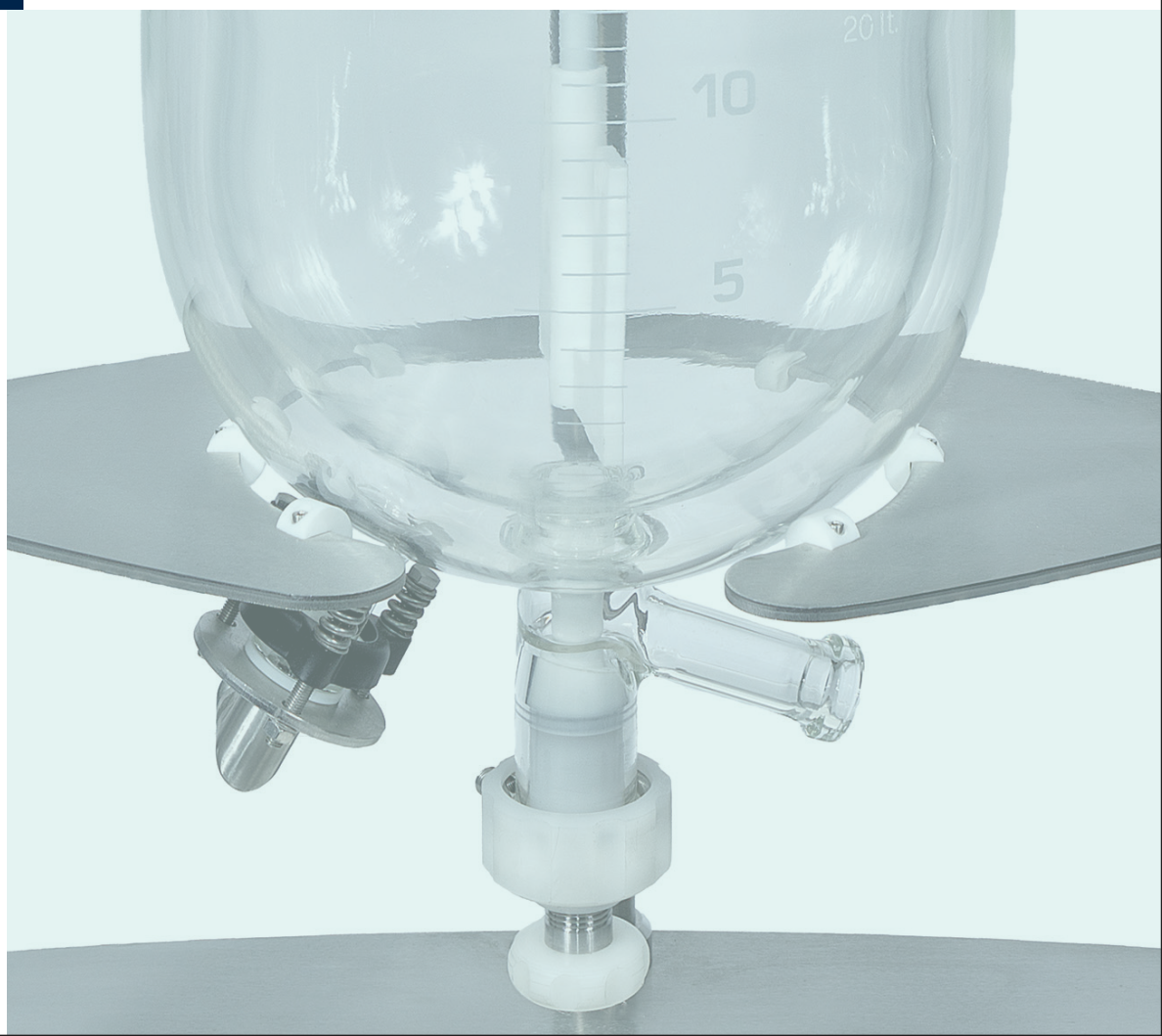


## PHARMA REACTOR

PROCESS DIVISION



# 10, 20 30L Glass Pharma Reactor

Complete reaction system on our unique free standing movable frame. Industrial design, high performing industrial stirring system and connections. The unit is supplied with components listed below. Optional items are listed on the following pages.

- Gmp compliant;
- Total safety: no residues or stagnant liquids;
- For pharmaceutical use, FDA compliant (PTFE and Borosilicate Glass in contact with products);
- Multi-purpose;
- Complete glass piping;
- Compact design;
- Versions up to 20 L can be placed under the hood (H 1900 mm);
- Atex certification is available on request



## Feeding Vessel

- 5L graduated flask (10L available on request)
- Complete glass piping
- GMP compliant
- Supporting clamps

## Electrical or Compressed air motors

## Condenser

- 0.6m<sup>2</sup> condenser with high exchange capacity
- More efficient refrigeration
- Multi-purpose
- Many accessories available
- Safety rupture disk
- Vacuum jacketed distilling column

## Collection Vessel

- 5L graduated flask (10L available on request)
- Complete glass piping
- GMP compliant
- Supporting clamps

## Reaction Vessel

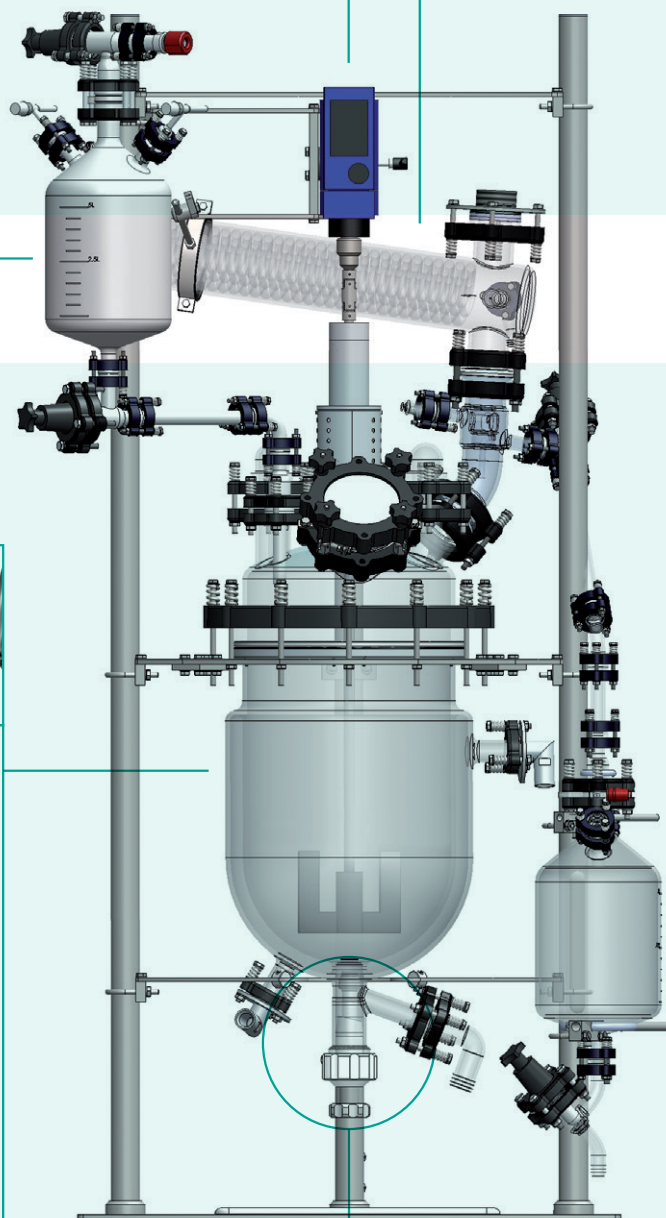
- Quick loading system
- Transparent glass to facilitate visual check during reaction
- Jacketed vessel easy to connect to the chiller
- Excellent reaction temperature control
- Homogeneous liquid agitation
- The larger lid allows the presence of multiple nozzles, increasing the potential control of reaction

## Stirring system

- It can work for days without damages
- Long-lasting system without breakages due to turbulences for viscous liquids agitation

## Ultra Gmp valve

Glass part welded to the reactor, bonnet and shutter





# 10, 20 30L Glass Pharma Reactor

## Data sheet

### Working Conditions:

Design Temperature : -50 °C / 180 °C  
TΔ: 80 °C  
Design Pressure : -1 mbar / 0,49 bar  
Max vacuum: 5 mbar

### Reaction group:

- DN300 Jacketed vessel
- 10L, 20L and 30L nominal capacity
- DN300 Glass lid 7 necks:
  - a) DN25 central for stirring
  - b) DN80 with closure for solid loading
  - c) DN25 for liquid inlet
  - d) DN50 for vapour line
  - e) DN40 closed and free (on request)
  - f) DN40 closed and free (on request)
  - g) DN40 closed and free (on request)
- AISI304 Stirring shaft, PTFE-coated
- PTFE Stirring anchor blade
- PTFE/glass mechanical seal - ATSA25/16
- 25mm discharge bottom valve, Gmp compliant

### Power supply:

- ELECTRICAL MOTOR 140Watt, approx. 230V or
- COMPRESSED AIR MOTOR air worn out 260 l/min at 6bar

### Ultra Gmp valve:

- Total safety
- Gmp/Pharma compliant
- The valve completely drains leaving any stagnating liquid
- Compact design
- Constant valve closure pressure during temperature changes
- Compensation of thermal expansion
- Design helps preventing shutter head over-tightening

### Pt 100 temperature probe:

- Product temperature can also be controlled with very low liquid levels
- The probe is placed inside drain valve freeing up a nozzle
- Quicker temperature reading when compared to sensor placed on lid
- No risk of glass sensor breakages due to accidental impacts with solid suspensions
- Pneumatic valve on request

**Dimensions:** Reactor dimensions: mm800x660x1.890H  
Box dimensions (fumigated wooden box) mm950x800x2.200H

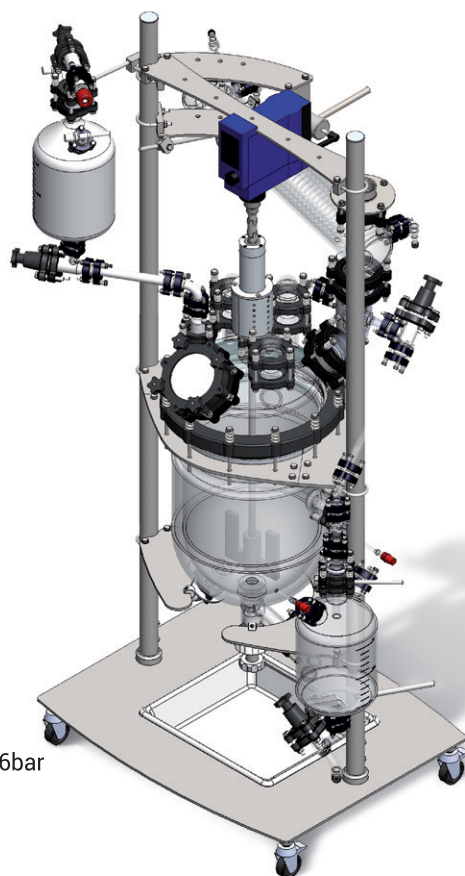
**Weight:** APPROX 130 Kg

### Certifications:

- Gmp certification for bottom valve
- Machinery Directive
- User Manual

### Note:

The equipment can work in dangerous areas or with inflammable solutions only in ATEX version (available on request).



PHARMA REACTOR

STEROGLASS®

PROCESS DIVISION

10L, 20L, 30L

CODE	DESCRIPTION	CODE	MOTOR TYPE
<b>SQHK078027</b>	10L Glass Pharma Reactor (w/o motor)	<b>SQA0080339</b>	Electric (model ST 1800 DF)*
<b>SQHK077663</b>	20L Glass Pharma Reactor (w/o motor)	<b>SQA0080339</b>	Electric (model ST 1800 DF)*
<b>SQHK078026</b>	30L Glass Pharma Reactor (w/o motor)	<b>SQA0080339</b>	Electric (model ST 1800 DF)*
* triphase electrical motor available on request			
<b>SQHK083381</b>	10L Glass Pharma Reactor (w/o motor)	<b>VAJQ080147</b>	Pneumatic air motor
<b>SQHK083382</b>	20L Glass Pharma Reactor (w/o motor)	<b>VAJQ080147</b>	Pneumatic air motor
<b>SQHK083383</b>	30L Glass Pharma Reactor (w/o motor)	<b>VAJQ080147</b>	Pneumatic air motor

# 50L Glass Pharma Reactor

Complete reaction system on our unique free standing movable frame.  
Industrial design, high performing industrial stirring system and connections.  
The unit is supplied with the components listed below.  
Optional items are listed on the following pages.

- Gmp compliant;
- Total safety: no residues or stagnant liquids;
- For pharmaceutical use, FDA compliant (PTFE and Borosilicate Glass in contact with products);
- Multi-purpose;
- Complete glass piping;
- Compact design;
- It can be placed under walk-in hoods (H2550 mm);
- Atex certification is available on request



## Electrical motor included

Compressed air motor on request

## Condenser

- 1,5m<sup>2</sup> with high exchange capacity
- More efficient refrigeration
  - Multi-purpose
- Many accessories available
  - Safety rupture disk
- Vacuum jacketed distilling column

## Feeding Vessel

- 10L graduated flask
- Complete glass piping
- Gmp compliant
- Supporting clamps

## Collection Vessel

- 10L graduated flask
- Complete glass piping
- GMP compliance

## Ultra Gmp valve

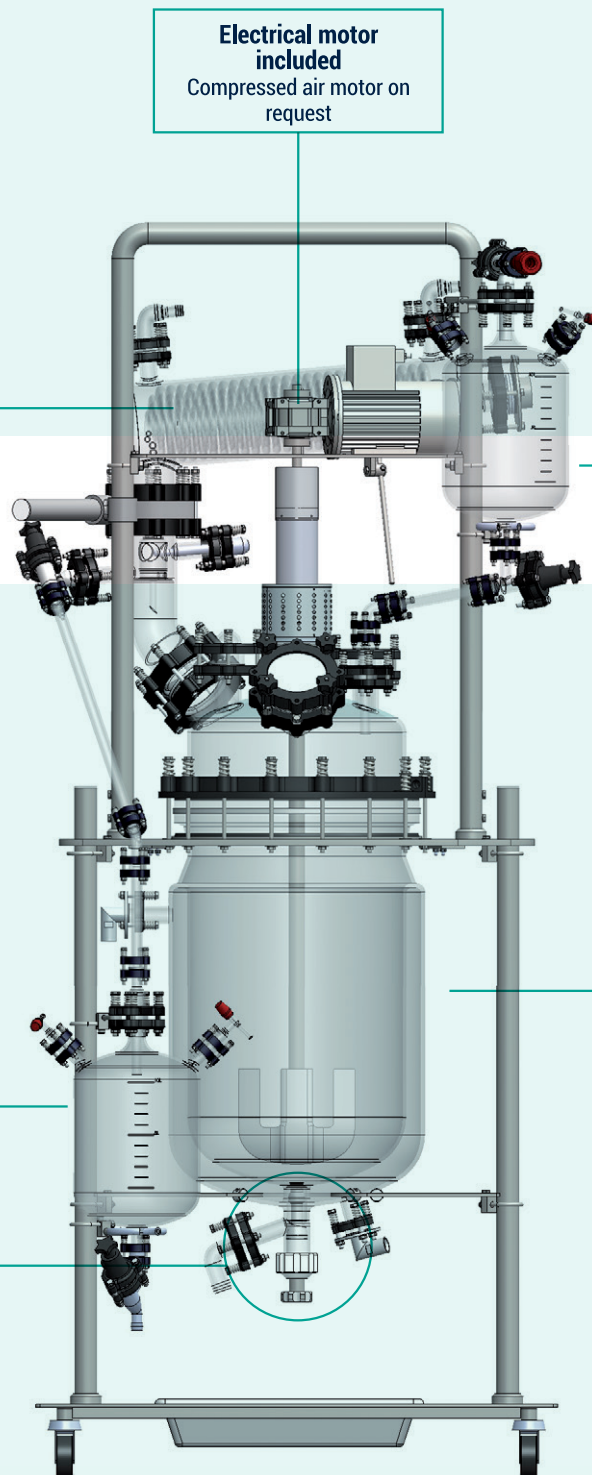
Glass part welded to the reactor, bonnet and shutter

## 50L Reaction Vessel

- Quick loading system
- Transparent glass to facilitate visual check during reaction
- Jacketed vessel easy to connect to the chiller
- Excellent reaction temperature control
- Homogeneous liquid agitation
  - The larger lid allows the presence of multiple nozzles, increasing the potential control of reaction

## Stirring system

- It can work for days without damages
- Long-lasting system without breakages due to turbulences for viscous liquids agitation





# 50L Glass Pharma Reactor

## Data sheet

### Working Conditions:

- Design Temperature : -40 °C / 180 °C
- TΔ: 80 °C
- Design Pressure : -1mbar / 0,49 bar
- Max vacuum: 5 mbar

### Reaction group:

- DN400 Jacketed vessel
- 50L nominal capacity
- DN400 Glass lid 7 necks:
  - a) DN50 central for stirring
  - b) DN80 with closure for solid loading
  - c) DN25 for liquid inlet
  - d) DN50 for vapour line
  - e) DN40 closed and free (on request)
  - f) DN40 closed and free (on request)
  - g) DN40 closed and free (on request)
- AISI304 Stirring shaft, PTFE-coated
- PTFE Stirring anchor blade
- PTFE/glass mechanical seal - ATSA50/26
- 25mm discharge bottom valve, Gmp compliant

### Power supply:

- ELECTRICAL MOTOR 0,37Kw (included)
- COMPRESSED AIR MOTOR air worn out 260 l/min at 6bar

### Ultra Gmp valve:

- Total safety
- Gmp/Pharma compliant
- The valve completely drains leaving any stagnating liquid
- Compact design
- Constant valve closure pressure during temperature changes
- Compensation of thermal expansion
- Design helps preventing shutter head over-tightening

### Pt 100 temperature probe:

- Product temperature can also be controlled with very low liquid levels
- The probe is placed inside drain valve freeing up a nozzle
- Quicker temperature reading when compared to sensor placed on lid
- No risk of glass sensor breakages due to accidental impacts with solid suspensions
- Pneumatic valve on request

### Dimensions:

- Reactor dimensions: mm1.000x800x2.400H
- Box dimensions (fumigated wooden box) mm1.500x1.400x2.000H

**Weight:** APPROX 280 Kg

### Certifications:

- Gmp certification for bottom valve
- Machinery Directive
- User Manual

### Note:

The equipment can work in dangerous areas or with inflammable solutions only in ATEX version (available on request).



50L PHARMA REACTOR

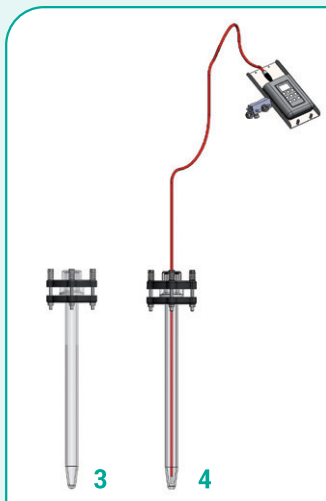
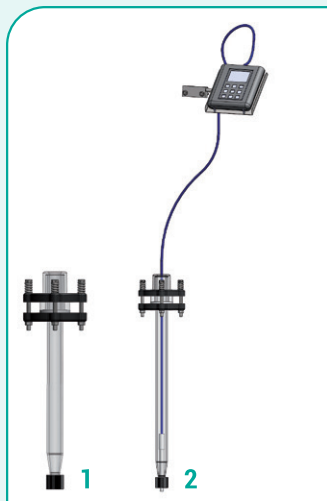


PROCESS DIVISION

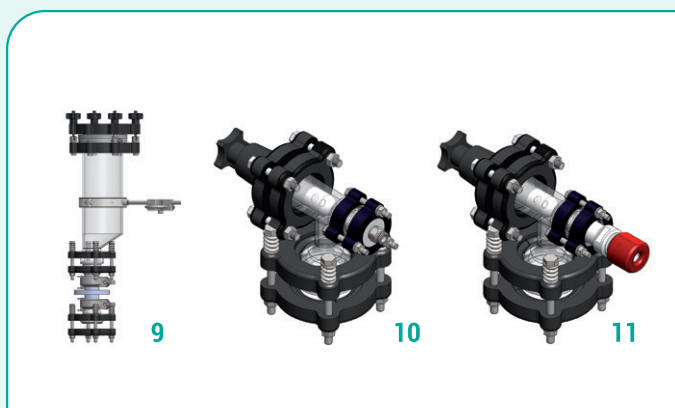
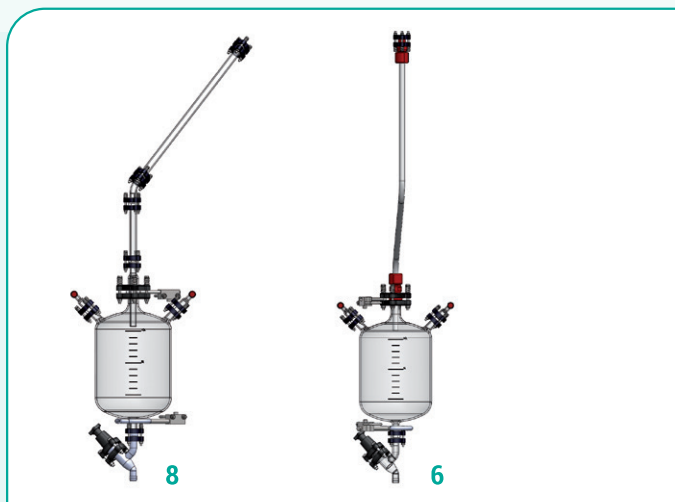
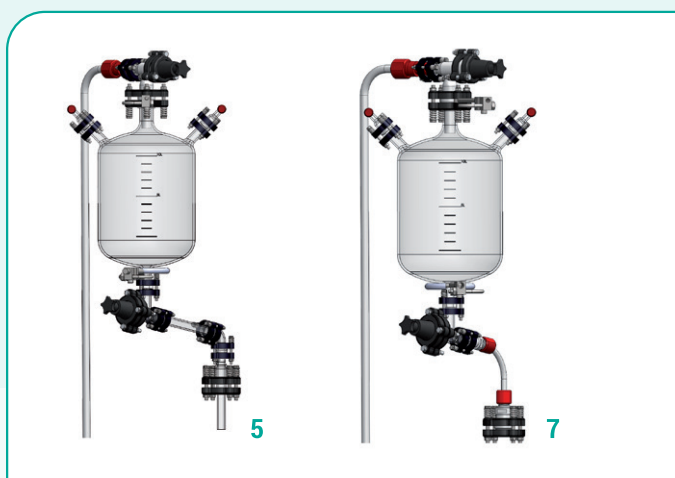
CODE	DESCRIPTION	MOTOR TYPE
SQHK083251	50L Glass Pharma Reactor DN 400	Electrical*
SQHK083252	50L Glass Pharma Reactor DN 450	Electrical*

\*air compressed motor available on request

## Accessories



- 1 pH Probe holder kit
- 2 pH reading kit
- 3 Pt 100 Probe holder kit
- 4 Pt 100 reading kit
- 5 2L, 5L and 10L feeding kit (glass connection)
- 6 2L, 5L and 10L collection kit (PTFE connection)
- 7 2L, 5L and 10L feeding kit (PTFE connection)
- 8 2L, 5L and 10L collection kit (glass connection)



CODE	DESCRIPTION	
SQEG080376	pH Probe holder kit (10lt reactor)	1
SQEG080377	pH Probe holder kit (20lt reactor)	
SQEG080378	pH Probe holder kit (30lt reactor)	
SQRI079139	pH Probe holder kit (50lt reactor)	
SQEG080379	pH reading kit (10lt reactor)	2
SQEG080381	pH reading kit (20lt reactor)	
SQEG080382	pH reading kit (30lt reactor)	
SQEG083411	pH reading kit (50lt reactor)	
SQEG080312	Pt 100 Probe holder kit (10lt reactor)	3
SQEG080317	Pt 100 Probe holder kit (20lt reactor)	
SQEG080318	Pt 100 Probe holder kit (30lt reactor)	
SQRI082439	Pt 100 Probe holder kit (50lt reactor)	
SQEG080322	Pt 100 reading kit (10lt reactor)	4
SQEG080323	Pt 100 reading kit (20lt reactor)	
SQEG080324	Pt 100 reading kit (30lt reactor)	
SQEG083410	Pt 100 reading kit (50lt reactor)	
SQHK083295	2L feeding kit (glass connection)	5
SQHK083294	5L feeding kit (glass connection)	
SQHK083293	10L feeding kit (glass connection)	
SQHK080340	2L collection kit (PTFE connection)	6
SQHK077645	5L collection kit (PTFE connection)	
SQHK077393	10L collection kit (PTFE connection)	
SQHK079731	2L feeding kit (PTFE connection)	7
SQHK077644	5L feeding kit (PTFE connection)	
SQHK077392	10L feeding kit (PTFE connection)	
SQHK083290	2L collection kit (glass connection)	8
SQHK083291	5L collection kit (glass connection)	
SQHK083292	10L collection kit (glass connection)	

- 9 Funnel for powder loading 2L addition port DN100
- 10 Nitrogen inlet valve connections for rilsan tube 6mm
- 11 Liquids feeding valve connections for rilsan tube for PTFE 12 x10 mm

CODE	DESCRIPTION
SQHK079772	Funnel for powder loading 2L (9)
SQHK080302	Nitrogen inlet valve (10)
SQHK080301	Liquids feeding valve (11)



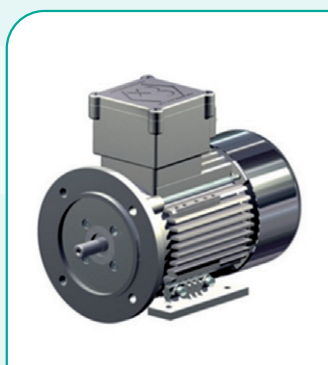
Remotely controllable ultra high torque  
high speed stirrer ST-1800DF  
for 10L, 20L and 30L reactors

CODE	DESCRIPTION
SQA0080339	ST 1800 DF overhead stirrer



Compressed air motor  
for 10L, 20L, 30L and 50L reactors

CODE	DESCRIPTION
VAJQ080147	Pneumatic air motor

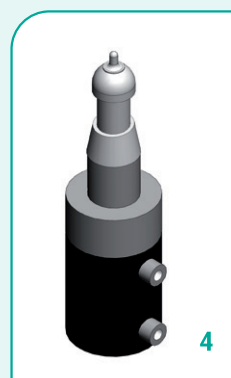
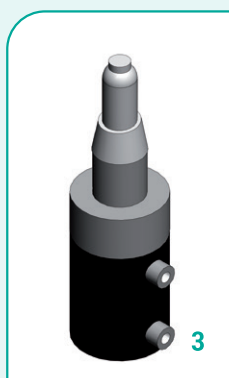
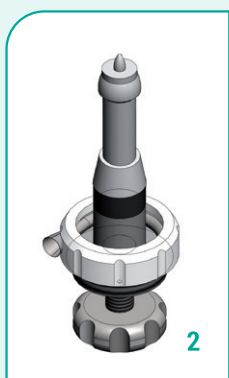
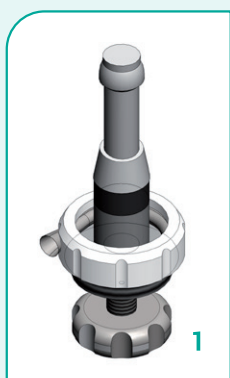


Gear motor kit for reactors

CODE	DESCRIPTION
SQHK082340	Kit gear motor for 10, 20, 30L reactors
SQA0082440	Kit gear motor for 50L reactor

Bottom valves

CODE	DESCRIPTION
SQTK076964	Bottom valve $\varnothing$ 25mm (1)
SQTK081394	Bottom valve with Pt100 $\varnothing$ 25mm (2)
SQTK083285	Pneumatic bottom valve $\varnothing$ 25mm (3)
SQTK083286	Pneumatic bottom valve with Pt100 $\varnothing$ 25mm (4)



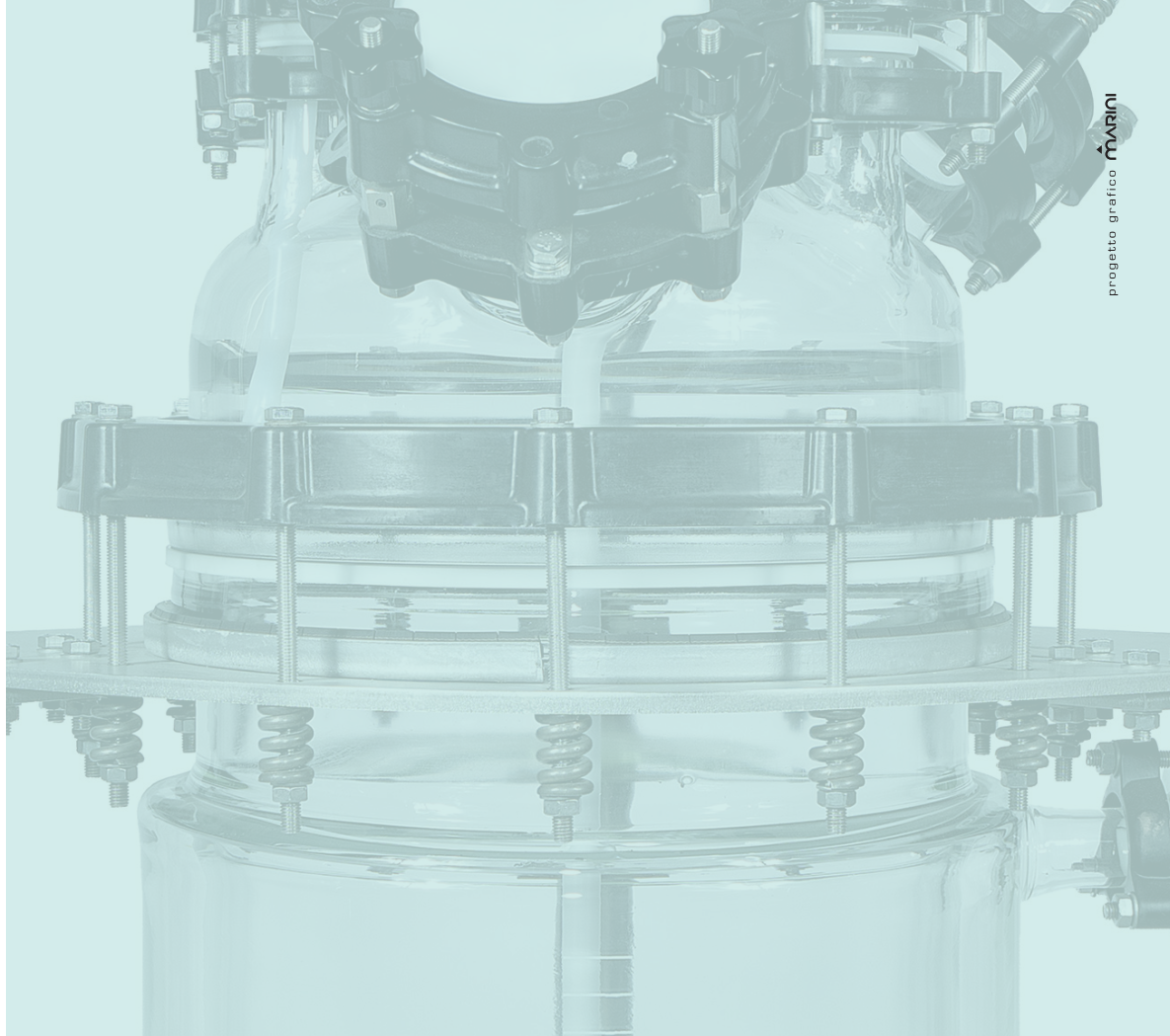
PHARMA REACTOR

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PROCESS DIVISION

ACCESSORIES





## PHARMA REACTOR

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