



## PandaPLUS 2000

From the world leader  
in high pressure  
homogenization:  
absolute quality  
and reliability  
with advanced  
technical solutions  
for any process need.

This small table-top laboratory unit, designed for continuous operation at high pressure, is the perfect equipment for high pressure processing of nanoparticles, nanodispersions, nanoemulsions, and for cell disruption. In addition, it can be successfully used for processing dairy products, fruit juices, liquid food, food additives and ingredients as well as cosmetic and chemical products. Tests can be run even with small sample volumes, and the results are comparable with those achieved on bigger size machines.

### COMPRESSION BLOCK

- High grade and high performances Super Duplex stainless steel
- Designed to ensure the maximum stress resistance to maximise the performances and reliability at high operating pressure
- Solid ceramic pumping piston
- Specially designed packing that avoid the needs for lubrication water
- Suction ball valve (PVB) in ceramic, with replaceable suction valve seat in AISI 630
- High precision pressure transducer with 4-20 mA signal
- Tungsten carbide as option

### HOMOGENIZING VALVE

- Reversible wear parts in tungsten carbide, ceramic as option
- Manual pressure adjustment by means of a hand-wheel
- Second stage homogenizing valve group applied as standard
- Allow front/upwards/downwards outlet to match with plant piping layout

### PRODUCT INLET/OUTLET

- Tri-Clamp™ connections supplied for inline installation
- No feeding pump is needed (for product viscosity up to 1000 cP)

### POWER END

- Three phase motor, suitable for variable speed drive
- Camshaft drive system and maintenance-free grease lubrication

### CASING

- Made in ABS, completely removable for maintenance and cleaning
- High quality stainless steel base frame
- Adjustable anti-vibration rubber feet

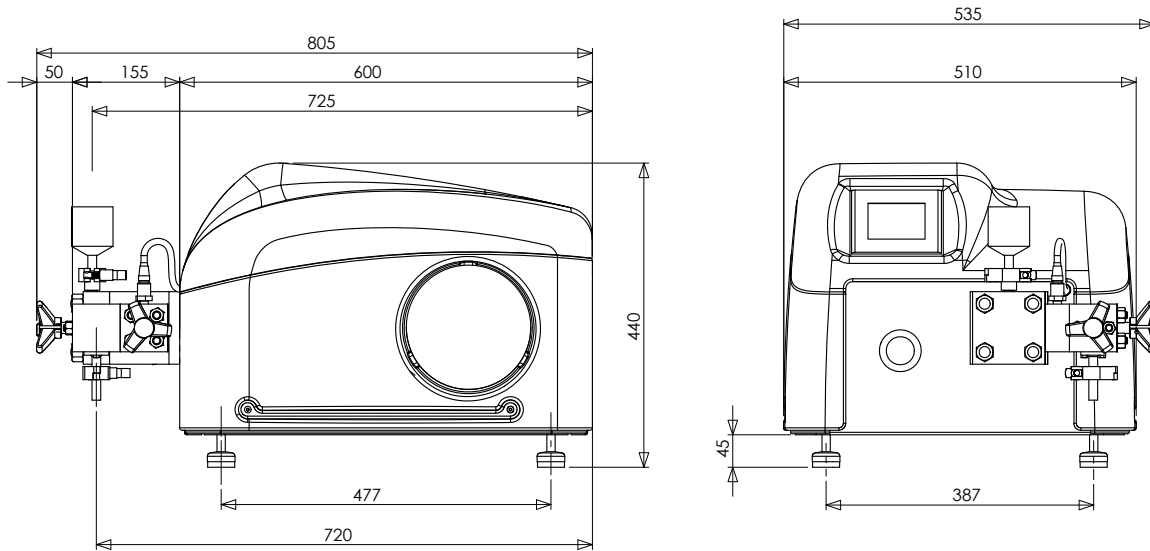
### CONTROL PANEL

- Touch screen display for machine control
- Start/stop drive control
- Pressure trend diagram visualization
- Built-in safety protection against overpressure



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## DIMENSIONAL DRAWING



measure in mm

The compact design of PandaPLUS offers an easy installation, use and maintenance. Thanks to special material selection and liquid end design, it is suitable for abrasive and viscous products and offers reliable use of high pressure energy for new production process development and optimized product formulation. In its standard configuration, it features a touch panel for easy control of all machine functions.

### DESIGN FEATURES AND PERFORMANCES

Max operating pressure 2000 bar

Three-phase motor 1.85 kW  
 200 V / 50 Hz  
 220 V / 50 - 60 Hz  
 400 V / 50 - 60 Hz  
 460 V / 60 Hz

Weight 105 Kg

Dimensions mm W 540 x H 440 x L 810

Connections in/out 1/2" Tri-Clamp™

Minimum sample volume approx 15 ml

Sound pressure level < 69 dB (A)

Suitable for CIP/SIP

### OPTIONS

- Electropolished version (Ra 0.5 µm)
- FDA approved gaskets and cGMP documentation
- In-line product cooler
- Pneumatic pusher for feeding hopper

| FLOW RATE (l/h) | PRESSURE (bar) | ELETRICAL SUPPLY (Hz) |
|-----------------|----------------|-----------------------|
| 9 l/h           | 2000 bar       | 50 Hz                 |
| 10,8 l/h        | 2000 bar       | 60 Hz                 |

Technical specifications are not mandatory and subject to change without notice



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