3 Technical Data and Parameter

GEA One Homogenizer

Model	GEA One Homogenizer 75TF
Technical Name	ONE75TF
Execution	Sanitary
Homogenizing stage	Double stage Homogenizer
Application	Dairy
Product	Fluid milk pasteurized (all animal types)
Max viscosity	Low (≤500 cP)
Maximum particle size	Low (≤ 500 µm)
Fiber length	Low (Fiber length ≤ 1,0mm)
Operating temperature	Medium (75°C ≤ & < 90°C) °C
Max salt content in the product	≤ 1%
Pressure	250 bar
Capacity (± 5%)	10000 l/h
RPM max	218
Max back pressure	≤ 5 bar
Min feed pressure	3-4 bar
Local conditions Temperature R.H. Height above sea level	 5° C – 40° C < 90 % ≤1000m
Power specification Capacity range Absorbed power Required power (VSD) Installed power	 100%->50% max Flow Rate 76.5 kW 84.1 kW 90 kW
Pumping pistons diameter	65 mm
Utilities Electrical supply Auxiliary circuits Water supply Air supply	 400V-50Hz 24 V DC 2 bar 6 bar
Cleaning temperature and time	<90° C – 30 min
Sterilization temperature and time	140° C - 30 min

NOTE: Check and confirm the above data

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3.1 Technical Dimensions

Technical data

Number of plungers	3
Absorbed motor power up to	75 kW
Net weight	2.400 kg
Gross weight	2.600 kg

Sustainability values

Energy consumption/1000 l product (kWh)	4,5
Water consumption/1000 l product (l)	9
Lubricating oil ISO VG 150	30 l/2.000 h
Lubricating and cooling water	90 l /h
Noise level	≤78 dB(A) ± 2
Carbon footprint/1000 l product (kg CO_2)	2,29

Process data
Sanitary execution: max. capacity at 150 bar; water max. hardness <15°fH, max. particle size 60 microns, filtred water; noise level at max. capacity and max. pressure at 1 meter distance; CO2 emissions based on electricity production generating 0,5 kg CO$_2$/kWh.
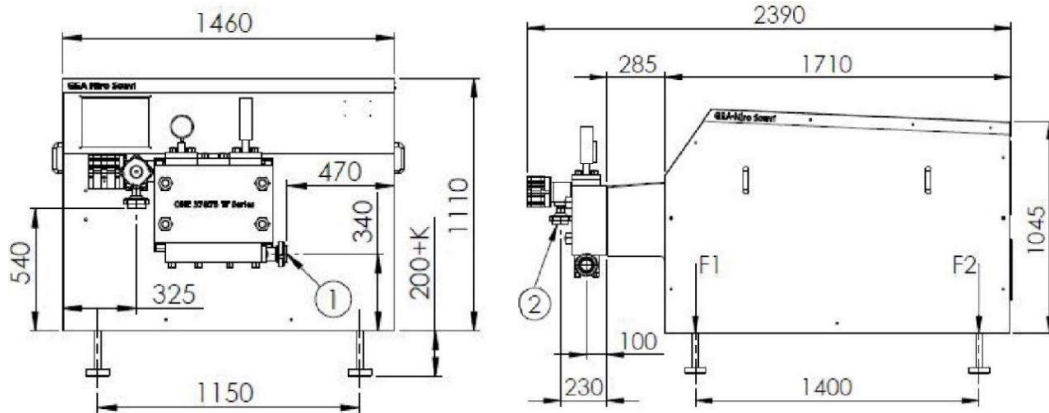
Measurement in mm.

All pictures shown are for illustration purposes only. The actual machine may vary due to enhancements.

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5   Additional Scope of Supply

5.1   Included Devices

75T01   2nd Stage pneumatic

2nd Stage homogenizing valve with pneumatic actuator and local pressure control on machine front panel

75T02   Inlet Pressure Transducer with display + L switch

Inlet Pressure Transducer with adjustable setpoint Low pressure signal (PNP type) and integrated digital display. 24VDC supply

75T04   Inlet Pulsation Dampener (up to 20 bar)

Inlet Pulsation Dampener, sanitary design, removable for inspection – up to 20 bar

75T05   Outlet Pulsation Dampener (up to 20 bar)

Outlet Pulsation Dampener (up to 20 bar backpressure), sanitary design, removable for inspection

75T06   Process line DIN 11851 Connections (Standard)

Process line in & out connections DIN 11851 (Standard) – up to 20 bar

75T08   Water Solenoid Valve

Solenoid Valve on water circuit

75T11   Crating of the machine

Crating of the machine

75T12   Bundle: Machine prepared for variable speed drive (down to 50%)

Bundle: Machine prepared for variable speed drive (down to 50% of nominal capacity) including built-in Stainless Steel EPB IP54 (One 37TF 380V÷480V) or external one IP55 (One 37TF 200V÷240V and One 75TF), External Danfoss VLT frequency converter (IP 55) and Electrical motor equipped for VSD. Includes electrical protection for motor and auxiliary circuits, hourmeter, alarm lamps, tagged components and cables, interface terminal board, electrical diagrams and components list. Assembled according to IEC and CE standards. Cables between machine and frequency converter NOT included. The EPB is prearranged for local / remote operation, via a LOC/REM selector on the EPB front door. Flow regulation from the display of the VLT

75T16   Water Flow Switch

Flow Switch on pistons lubrication water circuit

75T17   Pressure Gauge 2nd Stage

Pressure Gauge 2nd Stage – to measure independently the 2nd stage homogenizing pressure

75T22   Extra for Tungsten Carbide detonated plungers

Tungsten Carbide Detonated coated plungers instead of Chrome coated for abrasive conditions. Piston seals in KV / peek. On ONE7TS the piston seals remain HDD

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