

Homogeniser Data Sheet



Serial no: J5-18.206
Type: R185Q 54.5140
Date: 2018-10-09

Product data	
Product data	Other CO-RO product
Viscosity [cpi]	500
Solid Particles	No
Corrosive	No

Process data	Order data	Model data	
Flow, max ^{1,2}	15000	15000	L/H
Flow, min ^{1,2}	15000	4500	L/H
Product Temp	65	105	°C
Aseptic	No	Optional	
Total Pressure	400	400	Bar
2nd Stage Pressure	45	-	Bar
Discharge Pressure	5	-	Bar
Estimated Required Feed Pressure ³	3-7	-	Bar
Power Consumption	185	185	kW ±5%
RPM	164	190	

¹ Changing the flow outside the order data may not be possible without changing the configuration.

² All flow data are based on water like products

³ The required Feed Pressure is dependent on Product (primary Viscosity), Application, RPM, Machine Model, Homogenising Pressure.

Installation Data	
Machine weight incl. motor	8250kg
Oil (See Section 5.102)	
Power Frame	220L
Gear box	-
Hydraulic system	5L
Cooling water	See Section 7.100
Plunger lubrication	See Section 7.100
Taperlock size and torque for screws:	
Motor pulley	3525 / 113Nm
Gear pulley	5040 / 271Nm

Homogeniser specification	
Brand	Rannie
Model	R185Q 54.5140
Intermediate part material	1.4462
Pump valve type	Stellite Ball
Pump valve seat material	Stellite 20
Pump valve guide material	Solid 1.4462
Number of Stages	2
Homogenising valve type 1st stage	NG
Homogenising valve type 2nd stage	NG
Homogenising valve material 1st stage	Stellite 20
Homogenising valve material 2nd stage	Stellite 20
Actuator 1st Stage	Hydraulic
Actuator 2nd Stage	Hydraulic
Proportional valve(s) Type	Electrical
Number of Plungers	5
Plunger Material	Hard Metal Coated

Plunger Packings	Braided
Static Seal Material (o-rings)	Viton, FDA
Gasket Material	PEEK, FDA
Inlet Connection	2,5" Tri-Clamp Tri-Clamp
Discharge Connection	2,5" Tri-Clamp Tri-Clamp
Pressure Gauge Total Pressure	600Bar, 4-20mA output
Pressure Gauge 2nd stage	100Bar, 4-20mA output
Feed Pressure Gauge	0-16bar 4-20mA
Discharge Pressure Gauge	-
Relief Valve settings, Nominal	480Bar
Pulsation Dampener Inlet	2,5" Tri-Clamp inline Tri-Clamp
Pulsation Dampener Discharge	2,5" Tri-Clamp inline Tri-Clamp
Surface finish, Product contact parts	Ra 0,8 µ
Machine Cabinet Type	Low Noise

Electrical configuration for the machine

Main Voltage	3x400V 50Hz
Control Voltage	24Vdc
Electrical norm	CE
Starter Method (Informed by customer)	Frequency converter
Main Motor	250kW 1500RPM
Motor efficiency class	IE3
Main motor thermistor/sensor (included in main motor)	Included
External fan for main motor	-
Motor for Hydraulic Lift of Relief Valve	Not Included
Unloading Valve for Hydraulic Lift of Relief Valve	Not Included
Motor for Oil Pump	0,55 kW 1500RPM
Motor for hydraulic pump	0,25 kW 1500RPM
Hydraulic Quick Unloading Valve	Included
Hydraulic Proporsional Valve Amplifier card(s)	Included
Controller for automatic pressure control 1st stage	Not Included Customer supply
Controller for automatic pressure control 2nd stage	Not Included Customer supply
Solenoid valve for Cooling water HVA	Included
Solenoid valve for Cooling water Power Frame	Included
Solenoid valve for plunger lubrication water	Included
Machine Cabinet Light	230V
Machine Cabinet Light Switch	Included
Hour Counter	Included
Emergency Stop	Included
Start/Stop Push Button, Oil pump Motor / Main Motor	-
Start/Stop Push Button, HVA Motor	-
Green running lamp, Oil pump Motor / Main Motor	-
Green running lamp, HVA Motor	-
Potentiometer(s) for local Homogenising Pressure adjustment	-
Auto/Manual switch (Remote/Potentiometer selector switch)	-
Display(s) for Homogenising pressure	Included
Oil Pressure Switch, Power Frame	Included
Cabinet temperature 4-20mA output	Included
Flow sensor for plunger lubrication water	Included
Oil Level Switch, Power Frame	Included
Oil Temperature sensor, Power Frame	Included
Oil Temperature sensor, Hydraulic	Included
Oil Filter Switch	Included
Top Fan	0,2-0,3kW 3x400V 50Hz
Front Fan	Included
Rear Fan	Included
Cabinet/door lock switch ON/OFF on belt side	Included
Wiring	Components connected to terminal box