Minifermentor LAMBDA MINIFOR
Start-up kit reduced

Fermentation starting package allows to perform a normal fermentation under conditions of good quality and control:

1 instrument casing containing
- *AC power supply (universal voltage 100 to 240V/50-60Hz,400W)*
- *parabolic, gilded heat radiator,*
- *mass flow air flow-rate measuring system*
- *proportional air valve with tubing*
- *security valve 0,05MPa*
- *agitator with stirring discs, cable and fittings*
- *combined cable for pH and temperature Pt 100 sensor*
- *input sockets for DO sensor and an additional free parameter X*
- *electronic unit with 40x4 sign display and internal software*
- *incorporated key board*
- *two adjustable lateral reactor holders*
- *four sockets for pumps,*
- *one socket for alarm output*
- *one socket for PC control RS 485*
- *one mains cable*
- *one support rod*
- *input and output air hoses*

1 fermentation vessel total volume 1 l with
- *5 threaded sidearms (up to 8 sidearms as an option)*
- *5 Pyrex open screw caps with silicone joints*
- *4 blind caps for unused ports*
- *one large central screw cap*
- *one fermentor head*
- *one silicone sterility membrane*
- *one micro-sparger pipe with stirring disc*
- *one quadruple sampling port with Luer-Lock or PEEK fittings*
- *one input and output filter for air*
- *one air outlet condenser*

1 combined pH and temperature probe with cable
1 operation manual

Minifor start-up control unit contains:

- *one module for measurement and control of temperature*
- *one module for measurement and control of pH with automatic temperture correction*
- *one module for measurement and control of dissolved oxygen with autom. temp. correction*
- *one module for measurement and control of air-flow (precision mass flow system)*
- *one module for stirring control*
- *one module for measurement and control of another parameter (input 0 to 10V)*
- *(high and low alarms can be set for all measured parameters)*
- *(RS 485 line on all pump sockets)*