

# Reflex Servitec 60/T, self-optimising vacuum-spray tube degassing with make-up



Thinking solutions.



## Features

Type	60/T
Max. system volume	220 m <sup>3</sup>
max. perm. operating temperature	70 °C
operating pressure	0.5 - 4.5 bar
max. perm. operating pressure	8 bar
minimum inlet pressure makeup	0.10 bar
Max. sound pressure level	55 dB(A)
Electric connection	230V/50Hz
Pressure side connection	G1"
Connection outflow side	G 1/2"
Make-up connection	G 1/2"
Separation level, dissolved gases to	90 %
Max. partial volume flow network	0.550 m <sup>3</sup> /h
Max. volume flow makeup	0.550 m <sup>3</sup> /h
Rated electrical current	5.00 A
Max. electrical rated power	1.10 kW
Height	1205 mm
Width	678 mm
Depth	438 mm
Weight	36.00 kg

## Description

### Reflex Servitec

Vacuum spray tube degassing for system and make-up water degassing in sealed heating and chilled water systems, configured as a fully automatic multi-function unit with "auto-start" function and automatic hydraulic compensation of the degassing process and monitoring of the make-up function. Functional unit comprising a hydraulic part and a Control Touch operating unit. Both are ergonomically combined in an easy-to-maintain modular floor-standing framework system made of EV 1 anodized aluminium precision sections with CE marking. Degassing takes place within the hydraulic part using a stainless steel diaphragm pump in conjunction with a vertically arranged stainless steel vacuum spray tube. This is equipped with a vacuum spray nozzle, dipstick-tube degassing unit and pressure/level monitoring. The Control Touch operating unit with TFT colour display inclusive of communications electronics is integrated in a panel-type rugged plastic housing and mounted directly on the control unit with a horizontal alignment. An optional separate and vertical wall mounting plate at maximum three metres distance from the power electronics is possible. Communication electronics comprising:

- 4,3" resistive colour touchscreen for programming, operating documentation and monitoring as well as provision of help texts for all functions
- Two RS485 serial interfaces as data and/or communication interfaces

- Serial TTL-interface with two connection terminals for connection of 2 IO-boards
- Potential-free output for forwarding of the collective message
- Two electrically isolated analogue outputs e.g. for system pressure
- Input for the evaluation of contact water meters
- Slot for a compact bus module, one SD card, e.g. for data read-out, software updates, etc.
- Input for makeup functional request via external signal

The power electronics are installed in a dedicated plastic control cabinet which is mounted directly below the operating unit. Power supply is via a main switch. Featuring in detail:

- Main switch on housing exterior
  - Pump control
  - Cable management for external connections
  - Mounting slot for optional modules
- Control unit completely piped and wired ready for connection according to VDE regulations. System connections by means of integrated shut-off valves.

Control Touch is a fully automatic and freely programmable microprocessor control with touchscreen operation, real-time clock, differentiating error and pa-

rameter memory, combined graphical and clear-text display of system pressure, tank level and all relevant operating and fault messages with functional diagram. Signalling of the active operating mode, collective fault message, low water level and functioning of pump and make-up valve.

Vacuum spray degassing of the content, filling and make-up water in self-optimising operation with cycles for continuous, interval and make-up degassing. Controlled make-up via reliable three-way motorised ball valve. Actuation takes place via an integrated system pressure interpretation unit or an external 230 V signal (e.g. a pressurisation station) with automatic interruption and fault messaging upon exceeding of the running time and/or the number of cycles. Alternatively, make-up can be performed from an open system separator vessel. Evaluation option provided by a contact water meter including optional possible capacity monitoring of ion exchangers in the make-up pipe. Documentation and control of the entire system in respect of the above mentioned parameters.

